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TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE

HYGIENIC LABORATORY—BULLETIN No. 127

JUNE, 1921

Biological
& Medical
Serials

DIGEST OF COMMENTS
ON
THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA
AND ON THE
NATIONAL FORMULARY

FOR THE CALENDAR YEAR
ENDING DECEMBER 31
1918

By

A. G. DuMEZ

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PREFACE.

This, the fourteenth bulletin of the series of Digest of Comments on the two official drug standards of the United States of America—the United States Pharmacopœia and the National Formulary—is, like the preceding numbers, an attempt to reflect in a comprehensive manner the pharmaceutical, medical, and chemical literature pertaining to pharmacopœial subjects published during the calendar year ended December 31, 1918, and in a few cases for the preceding year where such literature was not available at an earlier date.

With the object in view, that of making the collection of material as comprehensive as possible, an earnest endeavor has been made to gather references to all contributions dealing in any way with the nature, tests, requirements, and applications of the officially recognized standards for drugs and medicinal preparations. In those cases in which the accomplishment of this purpose has not been fulfilled, it must be attributed in large part to the fact that certain of the foreign publications have not been regularly received in this country since the beginning of the war and were, therefore, not available for reviewing.

Not only has the literature pertaining directly to the two official standards mentioned above been reviewed, but an attempt has been made to reflect the literature which may have an indirect or future value in connection with the revision of these standards. For this reason the more important articles on food and drug laws, antinarcotic laws, poison laws, drug-inspection work, cultivation of medicinal plants, drug markets, preparation and properties of synthetic medicinal compounds, chemotherapy, antiseptics and disinfectants, and foreign pharmacopœias and standards have been reviewed and the abstracts included to the extent permitted by time and space.

The extent to which the law may become a factor in influencing the revision of our official standards for drugs and medicines is evidenced in the marked change in the character of the Pharmacopœia and the National Formulary as a result of the recognition of these works as legal standards under the pure food and drugs law. Undoubtedly the Harrison antinarcotic law, now in force, will necessitate the making of additional changes in these standards when they are again revised, and the probable enactment of a national prohibition law brings to mind a host of possibilities. The salutary effect of the enforcement of these laws is evident in at least one case, namely, the steady decline in the number of drugs reported adulterated or below standard. Abstracts of articles dealing with subjects of this character have been included under the general heading of "Legal status and development," and under comments on the individual items when of special significance with respect to the adulteration or quality of a specific drug or preparation.

Experimentation in the cultivation of medicinal plants is still occupying the attention of many of the pharmaceutical educators and manufacturers in this country and in Europe as a result of the inability to obtain sufficient supplies of some of the plant drugs during the war. A very considerable number of articles dealing with the subject have appeared during the past year. Practically all of these have been abstracted and appear among the comments on vegetable drugs.

As in previous numbers of this bulletin, the relation of the pharmacopoeia to certain phases of public-health work has been taken cognizance of and the more important articles dealing with the standardization of disinfectants and biologics have been abstracted and compiled. For similar reasons, comments on serums and vaccines, biological tests, clinical tests, culture media, and stains have been included to the extent merited by their relative importance in this connection.

The advance in our knowledge of chemotherapy has made rapid progress during the past few years in spite of the war and there are prospects of even greater developments in this field in the near future. The literature on the subject is becoming voluminous and has therefore not been reviewed completely. An effort, however, has been made to review all of the important articles on the chemotherapy of syphilis and tuberculosis. Abstracts of these articles are given place under the captions "Chemotherapy" and "Arsenic, Non-Official Compounds."

As in the past, an effort has been made to review the literature pertaining to work on the foreign pharmacopœias. This task has not been difficult as comparatively little work of this nature has been published during the period of the war. There is evidence, however, to the effect that the comments pertaining to the European standards will be more numerous in the future. The pharmacopœial commission of the "Deutsche Pharmazeutische Gesellschaft" has been quite active during the past year in obtaining suggestions for the revision of the German pharmacopœia, and the members of the new "Codex Commission" have been named by the minister of public instruction of France. It has also been reported that the work of revising the fourth edition of the Dutch pharmacopœia has about been completed and that the new work will appear soon. References to the more important articles relating to foreign pharmacopœias are given under headings designated by the names of the respective pharmacopœias and under "Comments on Official Articles."

For the information of the reader, it should be stated that in the preparation of this bulletin the literature has been abstracted with a view to economizing in the use of space, the intent being to call attention to the character and scope of the original paper rather than to record its actual content. It should also be stated that the space devoted to an abstract is no indication of its relative importance, though some idea of the nature and value of the original article may be obtained from its length as indicated by the page reference. In citing references, no effort has been made to record all of the journals in which any given paper may have appeared. Where an article has appeared in more than one periodical, the more available publication usually has been given preference, even in cases where the original article did not appear in the journal first quoted.

In conclusion, the compiler desires to thank the Bureau of Chemistry of the United States Department of Agriculture for the services of Miss Lottie M. Manross, who assisted in the preparation of many of the abstracts, and to express the appreciation of the Bureau of the Public Health Service to the publishers and editors of the journals, periodicals, and reports furnished in exchange; to the secretaries of State and national pharmaceutical organizations for copies of their annual proceedings; to John Uri Lloyd, of Cincinnati, for copies of the eclectic medical journals; to the editor of Chemical Abstracts for the loan of several publications; and to the officers of the library of the Office of the Surgeon General of the Army and the Library of Congress for the use of periodicals and reports not on file in this laboratory.

A. G. D.

DIVISION OF PHARMACOLOGY,
HYGIENIC LABORATORY,
February 9, 1921.

LIST OF THE LITERATURE REVIEWED.

1. TITLE ABBREVIATIONS—JOURNALS.

Abstr. Bact.—Abstracts of Bacteriology, Baltimore, 1918, v. 2.

Am. Druggist.—American Druggist and Pharmaceutical Record, N. Y., 1918, v. 66.

Am. Food J.—American Food Journal (The), Chicago, 1918, v. 13.

Am. J. Clin. Med.—American Journal of Clinical Medicine, 1918, v. 25.

Am. J. Dis. Children.—American Journal of Diseases of Children, 1918, v. 16.

Am. J. M. Sc.—American Journal of the Medical Sciences, Philadelphia, 1918, v. 154 and 155.

Am. J. Pharm.—American Journal of Pharmacy, Philadelphia, 1918, v. 90.

Am. J. Physiol.—American Journal of Physiology, Boston, 1918, v. 45 and 46.

Am. J. Public Health.—American Journal of Public Health, 1918, v. 8.

Am. J. Sc.—American Journal of Science, New Haven, 1918, v. 45 and 46.

Am. J. Syphilis.—American Journal of Syphilis, 1918, v. 2.

Am. Med.—American Medicine, 1918, v. 24.

Am. Perf.—American Perfumer and Essential Oil Review, New York, 1918, v. 12 and 13.

Am. Rev. Tuberculosis.—American Review of Tuberculosis, 1918, v. 1 and 2.

Anales soc. española fis. quim.—Anales de la sociedad española de fisica y quimica, Madrid, 1918, v. 16.

Anales soc. quim. Argentina.—Anales Sociedad quimica, Argentina, 1918, v. 6.

Analyst (The).—London, 1918, v. 43, Nos. 502–510.

Ann. Bot.—Annals of Botany, London, 1918, v. 32.

Ann. Chem.—Justus Liebig's Annalen der Chemie, Leipzig, 1918, v. 417.

Ann. chim. analyt.—Annales de chimie analytique, Paris, 1918, v. 23.

Ann. chim. applicata.—Annali di chimica applicata, Roma, 1918, v. 9 and 10.

Ann. Falsif.—Annales de Falsifications, Paris, 1918, v. 11.

Ann. inst. Pasteur.—Annales de l'Institute Pasteur, Paris, 1918, v. 32.

Apothecary (The), Boston, 1918, v. 30.

Apoth.-Ztg.—Apotheker-Zeitung, Berlin, 1918, v. 33.

Arch. Chem. Mikros.—Archiv für Chemie und Mikroskopie, Wien, 1917, v. 10; 1918, v. 11.

Arch. exper. Path. u. Pharmakol.—Archiv für experimentelle Pathologie und Pharmakologie, 1918, v. 82, 83, and 84.

Arch. farmacol. sper.—Archivio di farmacologia sperimentale e Scienze affini, Sienna, 1918, v. 25 and v. 26.

Arch. Int. Med.—Archives (The) of Internal Medicine, Chicago, 1918, v. 21 and 22.

Arch. méd. pharm. mil. Paris.—Archives de médicine et de pharmacie militaires, Paris, 1918, v. 69.

Arch. méd. pharm. nav. Paris.—Archives de médicine et pharmacie navales, Paris, 1918, v. 105 and 106.

Arch. Pharm.—Archiv der Pharmazie, Berlin, 1918, v. 256.

Archiv Pharm. Chem.—Archiv for Pharmaci og Chemi, Copenhagen, 1918, v. 25.

Arkiv Kem. Min. och Geol.—Arkiv för Kemi, Mineralogi och Geologi, Stockholm, 1917 and 1918, v. 7.

Atti accad. Lincei.—Atti della reale accademie dei Lincei, 1918, v. 27.

Ber. deutsch. chem. Gesellsch.—Berichte der deutschen chemischen Gesellschaft, Berlin, 1918, v. 51.

Ber. deutsch. pharm. Gesellsch.—Berichte der deutschen pharmazeutischen Gesellschaft, Berlin, 1917, v. 27; 1918, v. 28.

Biochem. J.—Biochemical Journal, Liverpool, 1918, v. 12.

Biochem. Ztschr.—Biochemische Zeitschrift, Berlin, 1918, v. 90.

Boll. chim. farm.—Bolletino Chimico-Farmaceutico, Milan, 1918, v. 57.

Boston M. & S. J.—Boston Medical and Surgical Journal, 1918, v. 178 and 179.

Bot. Gaz.—Botanical Gazette, Chicago, 1918, v. 65 and 66.

Brit. Food J.—British Food Journal, London, 1918, v. 20.

Brit. M. J.—British Medical Journal, London, 1918, v. 1 and 2.

Bull. Assoc. Gén. Syn. Pharm. France.—Bulletin de l'Association Générale des Syndicats Pharmaceutiques de France, 1918, v. 21.

Bull. Bur. Stand.—Bulletins of the Bureau of Standards, Department of Commerce, 1918, v. 14.

Bull. California Bd. Health.—Monthly Bulletin, California State Board of Health, 1918.

Bull. Connecticut Agric. Exper. Sta.—Bulletin of the Connecticut Agricultural Experiment Station, 1918, Nos. 201–206.

Bull. Connecticut Bd. Health.—Monthly Bulletin Connecticut State Board of Health, Hartford, 1918, v. 32.

Bull. Florida Dept. Agric.—Quarterly Bulletin of the Florida Department of Agriculture, 1918.

Bull. gén. Therap.—Bulletin général de Therapeutique, Paris, 1918, v. 171.

Bull. Hyg. Lab.—Bulletins, Hygienic Laboratory, U. S. Public Health Service, 1918, No. 111.

Bull. Illinois Bd. Health.—Bulletin of the Illinois State Board of Health, Springfield, 1918, v. 4.

Bull. Imp. Inst.—Bulletin of the Imperial Institute, London, 1918, v. 16.

Bull. Indiana Bd. Health.—Monthly Bulletin of the Indiana State Board of Health, Indianapolis, 1918, v. 21.

Bull. Lab. Inl. Rev. Dept. Canada.—Bulletins of the Laboratory of the Inland Revenue Department, Ottawa, Canada, 1918.

Bull. Louisiana Bd. Health.—Quarterly Bulletin of the Louisiana State Board of Health, 1918, v. 9.

Bull. Maine Bd. Health.—Bulletin of the State Board of Health of Maine, Augusta, 1918, v. 1.

Bull. Maine Dept. Agric.—Bulletin of the Maine Department of Agriculture, 1918.

Bull. Massachusetts Bd. Health.—Bulletin Massachusetts State Board of Health, 1918, v. 5.

Bull. Michigan Bd. Health.—Public Health, published by the Michigan State Board of Health, Lansing, 1918.

Bull. Montana Dept. Pub. Health.—Bulletin of the Department of Public Health of the State of Montana, Helena, 1918.

Bull. New Hampshire Bd. Health.—Quarterly Bulletin of the State Board of Health of New Hampshire, 1918, v. 6, Nos. 1, 2, 3, and 4.

Bull. New Jersey Dept. Health.—Public Health News Bulletin, Department of Health of the State of New Jersey, 1918, v. 4.

Bull. New York Agric. Exper. Sta.—Technical Bulletin of the New York Agricultural Experiment Station, Geneva, 1918, Nos. 65–78.

Bull. New York Dept. Health.—Bulletin of the New York State Department of Health, 1918, v. 13.

Bull. New York City Dept. Health.—Bulletin of the New York City Department of Health, 1918.

Bull. North Carolina Dept. Agric.—Bulletin of the North Carolina Department of Agriculture, 1918.

Bull. North Carolina Bd. Health.—Bulletin of the North Carolina State Board of Health, 1918, v. 33.

Bull. North Dakota Bd. Health.—Bulletin of the North Dakota State Board of Health, 1918, v. 11.

Bull. North Dakota Exper. Sta. F. Dept.—Bulletin (Special) of the Food Department of the North Dakota Agricultural Experiment Station, 1918, v. 5.

Bull. Ohio Dept. Agric.—The Official Bulletin of the Ohio State Department of Agriculture, 1918.

Bull. N. W. D. A.—Bulletin of the National Wholesale Druggists' Association, 1918.

Bull. Pharm.—Bulletin of Pharmacy, Detroit, 1918, v. 32.

Bull. Porto Rico Agric. Exper. Sta.—Bulletin of the Porto Rico Agricultural Experiment Station, 1918.

Bull. Rhode Island Bd. Health.—Bulletin of the Rhode Island State Board of Health, 1918, v. 4.

Bull. sc. pharmacol.—Bulletin des Sciences pharmacologiques, Paris, 1918, v. 25.

Bull. soc. chim. France.—Bulletin de la société chimique de France.—1918, v. 23 and 24.

Bull. Soc. scient. et. méd. l'ouest.—Bulletin de la Société scientifique et médicale dé l'ouest, Rennes, 1918.

Bull. U. S. Dept. Agric.—Bulletins of the U. S. Department of Agriculture, 1918. No. 679.

Bull. Vermont Bd. Health.—Bulletin of the Vermont State Board of Health, 1918.

Bull. West Virginia Bd. Health.—Bulletin of the West Virginia Public Health Council, 1918, v. 5.

Bull, Wyoming Agric. Exper. Sta.—Bulletin of the University of Wyoming Agriculture Experimental Station, 1918, Nos. 118 and 119.

Canadian Pharm. J.—Canadian Pharmaceutical Journal, Toronto, 1918, v. 51 and 52.

Centralb. f. Bakteriol.—Centralblatt für Bakteriologie, Parasitenkunde und Infectsionskrankheiten, Jena, 1918, v. 80, Nos. 6, 7, and 8.

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Chem. Analyst.—Chemist-Analyst (The), Phillipsburg, N. J., 1918, v. 24–27.

Chem. & Drug.—Chemist and Druggist, London, 1918, v. 90.

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Chem. Weekblad.—Chemisch Weekblad, Amsterdam, 1918, v. 15.

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Chem. Zentralbl.—Chemisches Zentralblatt, Berlin, 1918, v. 89, part 1 and 2.

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Compt. rend. acad. sc.—Comptes rendus hebdomadaires des séances de l'Academie des sciences, Paris 1918 v. 166 and 167.

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Ellingwood's Therap.—Ellingwood's Therapeutist, Boston, 1918, v. 12.

Endocrinology, 1918, v. 2.

Exper. Sta. Record.—Experiment Station Record, U. S. Department of Agriculture, 1918, v. 38 and 39.

Farm. Españ.—La Farmacia Española, Madrid, 1918, v. 50.

Gaz. chim. ital.—Gazzetta chimica italiana, Roma, 1918, v. 48.

Giorn. farm. chim.—Giornale di farmacia, di chimica e di scienze affini, Torino, 1918, v. 67.

Hahnemann. Month.—Hahnemannian Monthly, Philadelphia, 1918, v. 53.

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J. Am. Chem. Soc.—Journal of the American Chemical Society, Easton, 1918, v. 40.

J. Am. Inst. Homop.—Journal of the American Medical Institute of Homeopathy, Chicago, 1918, v. 11.

J. Am. M. Assoc.—Journal of the American Medical Association, Chicago, 1918, v. 70 and 71.

J. Am. Pharm. Assoc.—Journal of the American Pharmaceutical Association, Philadelphia, 1918, v. 7.

J. Am. Vet. Med. Assoc.—Journal of the American Veterinary Medical Association, Ithaca, 1917, v. 52; 1918, v. 53 and 54.

J. Assoc. Off. Agric. Chem.—Journal of the Association of Official Agricultural Chemists, Baltimore, 1918, v. 3, No. 1.

J. Bact.—Journal of Bacteriology, Baltimore, 1918, v. 3.

J. Biol. Chem.—Journal of Biological Chemistry, New York, 1918, v. 33, 34, 35, and 36.

J. Chem. Ind. Japan.—Kogyo-Kwagaku (Journal of Chemical Industry, Japan), 1918, v. 21.

J. Chem. Soc. Lond.—Journal of the Chemical Society, London, 1918, v. 113 and 114.

J. chim. phys.—Journal de chimie physique, Genève et Paris, 1918, v. 16.

J. Exper. M.—Journal of Experimental Medicine, New York, 1918, v. 27 and 28.

J. Franklin Institute.—Journal (The) of the Franklin Institute, Philadelphia, 1917, v. 183 and 184; 1918, v. 185 and 186.

J. H. Hosp. Bull.—Johns (The) Hopkins Hospital Bulletin, Baltimore, 1918, v. 29.

J. Hyg.—Journal (The) of Hygiene, Cambridge, 1918, v. 16 and 17.

J. Immunol.—Journal of Immunology, Baltimore, 1918, v. 3.

J. Ind. & Eng. Chem.—Journal (The) of Industrial and Engineering Chemistry, Easton, 1918, v. 10.

J. Infec. Dis.—Journal (The) of Infectious Diseases, Chicago, 1918, v. 22 and 23.

J. Iowa Med. Soc.—Journal (The) of the Iowa State Medical Society, Des Moines, 1918, v. 8.

J. Jamaica Agric. Soc.—Journal (The) of the Jamaica Agricultural Society, 1918, v. 22.

J. Lab. & Clin. Med.—Journal (The) of Laboratory and Clinical Medicine, St. Louis, 1917–1918, v. 3.

J. Linnean Soc. Bot.—Journal of the Linnean Society, Botany, 1918, v. 45.

J. Med. Research.—Journal of Medical Research, Boston, 1918, v. 37 and 38.

J. Path. and Bact.—Journal (The) of Pathology and Bacteriology, Cambridge University, 1918, v. 22.

J. pharm. et chim.--Journal de pharmacie et de chimie, Paris, 1918, v. 17 and 18.

J. Pharmacol. & Exper. Therap.—Journal of Pharmacology and Experimental Therapeutics, Baltimore, 1918, v. 11 and 12.

J. Pharm. Soc. Japan.—Journal of the Pharmaceutical Society of Japan (Yakugakuzasshi), Tokyo, 1918.

J. Phys. Chem.—Journal (The) of Physical Chemistry, Ithaca, 1918, v. 22.

J. Physiol.—Journal (The) of Physiology, London, 1918, v. 52.

J. physiol. et path. gén.—Journal de physiologie et de pathologie générale, Paris, 1918, v. 17.

J. prakt. Chem.—Journal für praktische Chemie, Leipzig, 1918, v. 96 and 97.

J. Proc. Roy. Soc. New South Wales.—Journal and Proceedings of the Royal Society of New South Wales, 1918, v. 52.

J. Roy. Micros. Soc.—Journal of the Royal Microscopical Society, 1918.

J. Roy. Soc. Arts—Journal of the Royal Society of Arts, London, 1918, v. 66.

J. Soc. Chem. Ind.—Journal of the Society of Chemical Industry, London, 1918, v. 37.

J. Trop. Med. & Hyg.—Journal (The) of Tropical Medicine and Hygiene, London, 1918, v. 21.

J. Washington Acad. Sc.—Journal of the Washington Academy of Sciences, 1918, v. 8.

Kolloid-Ztschr.—Kolloid-Zeitschrift, Dresden and Leipzig, 1918, v. 22 and 23.

Lancet (The), London, 1918, v. 194 and 195.

Med. Council.—Medical Council, Philadelphia, 1918, v. 23.

Med. Rec.—Medical Record, New York, 1918, v. 93 and 94.

Merck's Rep.—Merck's Report, New York, 1918, v. 27.

Meyer Bros. Drug.—Meyer Brothers Druggist, St. Louis, 1918, v. 39.

Midl. Drug.—Midland Druggist and Pharmaceutical Review, Columbus, 1918, v. 52.

Mitt. Lebensm. Hyg.—Mitteilungen aus dem Gebiete der Lebensmittel-untersuchung und Hygiene veröffentlicht vom Schweizerischen Gesundheitsamt, Bern, 1918, v. 10.

Monatsh. Chem.—Monatshefte für Chemie, Vienna, 1918, v. 39 and 40.

Montreal Pharm. J.—Montreal Pharmaceutical Journal, 1918, v. 29.

N. A. R. D. J.—Journal (The) of the National Association of Retail Druggists, Chicago, 1918, v. 25, 26, and 27.

Nat. Drug Clerk.—National (The) Drug Clerk, Chicago, 1918, v. 6.

Nat. Druggist.—National (The) Druggist, St. Louis, 1918, v. 48.

Nat. Eclect. M. Assoc. Quart.—National (The) Eclectic Medical Association Quarterly, Cincinnati, 1918, v. 10.

Nature, London, 1918, v. 100, 101, and 102.

New Orleans M. & S. J.—New Orleans Medical and Surgical Journal, 1918, v. 71.

New York M. J.—New York Medical Journal, 1918, v. 107 and 108.

Northwestern Drug.—Northwestern (The) Druggist, Minneapolis, 1918, v. 19.

Off. Insp. Maine Agric. Exper. Sta.—Official Inspections, Maine Agricultural Experiment Station, 1918.

Ohio Pub. Health J.—Ohio (The) Public Health Journal, Columbus, Ohio, 1918, v. 9.

Oil, Paint & Drug Rep.—Oil, Paint and Drug Reporter, New York, 1918, v. 93 and 94.

Pacific Pharm.—Pacific (The) Pharmacist, San Francisco, 1918, v. 11 and 12.

Pennsylvania Med. J.—Pennsylvania Medical Journal, Athens, 1918, v. 21 and 22.

Perf. & Ess. Oil Rec.—Perfumery and Essential Oil Record, London, 1918, v. 9.

Pharm. Era.—Pharmaceutical (The) Era, New York, 1918, v. 51.

Pharm. J.—Pharmaceutical (The) Journal, London, 1918, v. 100 and 101.

Pharm. Post.—Pharmaceutische Post, Vienna, 1918, v. 51.

Pharm. Weekblad.—Pharmaceutisch Weekblad, Amsterdam, 1918, v. 55.

Pharm. Zentralh.—Pharmazeutische Zentralhalle für Deutschland, Dresden, 1918, v. 59.

Philippine J. Sc.—Philippine (The) Journal of Science, Manila, 1918, v. 13, Sec. A, B, C, and D.

Phil. Mag.—The London, Edinburgh and Dublin Philosophical Magazine and Journal of Science, 1918, v. 35 and 36.

Physiol. Abstr.—Physiological Abstracts, London, 1918, v. 2 and 3.

Pract. Drug.—Practical (The) Druggist and Pharmaceutical Review of Reviews, New York, 1918, v. 36.

Practitioner (The), London, 1918, v. 100 and 101.

Presse médicale, Paris, 1918, v. 26.

Proc. Am. Drug Mfg. Assoc.—Proceedings of the American Drug Manufacturers' Association, 1918.

Proc. Linn. Soc. N. S. W.—Proceedings of the Linnean Society of New South Wales, 1917, v. 42; 1918, v. 43.

Proc. Nat. Acad. Sci.—Proceedings of the National Academy of Sciences, Washington, 1918, v. 4.

Proc. N. W. D. A.—Proceedings of the National Wholesale Druggists' Association, New York, 1918.

Proc. Roy. Soc. Lond.—Proceedings of the Royal Society, London, 1917, Series B, v. 90 and 91; Series A, v. 93 and 94; 1918, Series A, v. 94.

Proc. Soc. Exper. Biol. & Med.—Proceedings of the Society for Experimental Biology and Medicine, 1918, v. 15 and 16.

Proceedings of State pharmaceutical associations:

- Proc. California Pharm. Assoc. 1918.
- Proc. Connecticut Pharm. Assoc. 1918.
- Proc. Florida Pharm. Assoc. 1918.
- Proc. Georgia Pharm. Assoc. 1918.
- Proc. Illinois Pharm. Assoc. 1918.
- Proc. Kansas Pharm. Assoc. 1918.
- Proc. Kentucky Pharm. Assoc. 1918.
- Proc. Louisiana Pharm. Assoc. 1918.
- Proc. Maryland Pharm. Assoc. 1918.
- Proc. Minnesota Pharm. Assoc. 1918.
- Proc. Missouri Pharm. Assoc. 1918.
- Proc. Nebraska Pharm. Assoc. 1918.
- Proc. New Hampshire Pharm. Assoc. 1918.
- Proc. New Jersey Pharm. Assoc. 1918.

Proceedings of State pharmaceutical associations—Continued.
Proc. New York Pharm. Assoc. 1918.
Proc. North Carolina Pharm. Assoc. 1918.
Proc. Pennsylvania Pharm. Assoc. 1918.
Proc. South Carolina Pharm. Assoc. 1918.
Proc. Texas Pharm. Assoc. 1918.
Proc. Vermont Pharm. Assoc. 1918.
Proc. Washington Pharm. Assoc. 1918.
Proc. Wisconsin Pharm. Assoc. 1918.

Public Health Rep.—Public Health Reports, Washington, 1918, v. 33.

Pure Products, New York, 1918, v. 14.

Répert. pharm.—Répertoire de Pharmacie, Paris, 1918, v. 29.

Rep. Alabama Bd. Health.—Annual Report of the State Board of Health of Alabama, 1917 and 1918.

Rep. California Bd. Health.—Twenty-fifth Biennial Report of the California Board of Health, 1916–1918.

Rep. District of Columbia Health Off.—Report of the Health Officer of the District of Columbia, Washington, 1918.

Rep. Connecticut Agric. Exper. Sta.—Report of the Connecticut Agricultural Experiment Station, 1918, Bulletin 210.

Rep. Connecticut D. & F. Com.—Twenty-second Report of the Connecticut Dairy and Food Commissioner, 1917 and 1918.

Rep. Florida Dept. Agric.—Fifteenth Biennial Report of the Department of Agriculture of the State of Florida, 1917 and 1918.

Rep. Georgia Dept. Agric.—Report of the Georgia Department of Agriculture, 1918.

Rep. Kansas Bd. Health.—Ninth Biennial Report of the Kansas State Board of Health, 1918, v. 12 and 13.

Rep. Maine Agric. Exper. Sta.—Thirty-second Annual Report of the Maine Agricultural Experiment Station, 1918.

Rep. Massachusetts Bd. Health.—Report of the State Department of Health of Massachusetts, Boston, 1918.

Rep. Michigan F. & D. Com.—Twenty-fifth report of the Dairy and Food Commissioner of the State of Michigan, 1918.

Rep. Minnesota D. & F. Com.—Seventeenth Biennial Report of the Minnesota State Dairy and Food Commissioner, 1918.

Rep. Nebraska Bd. Pharm.—Thirty-first Annual Report of the Board of Examiners of the Nebraska State Board of Pharmacy, Creston, 1918.

Rep. Nebraska Dept. Agric.—Annual Report of the Nebraska State Board of Agriculture, 1918.

Rep. Nebraska F. D. D. & O. Com.—Biennial Report of the Food, Drug, Dairy and Oil Commission to the Governor of the State of Nebraska, Lincoln, 1916–1918.

Rep. New Hampshire Bd. Health.—Twenty-fifth report of the New Hampshire State Board of Health, 1918.

Rep. New Jersey Bd. Pharm.—Seventeenth Annual Report of the Board of Pharmacy of the State of New Jersey, 1918.

Rep. New Jersey Dept. Health.—Forty-third Report of the Department of Health of the State of New Jersey, 1918.

Rep. North Carolina Dept. Agric.—Biennial Report of the North Carolina Commissioner of Agriculture, 1916–1918.

Rep. Pennsylvania Bd. Pharm.—Thirtieth Annual Report of the State Pharmaceutical Examining Board of Pennsylvania, Harrisburg, 1918.

Rep. Rhode Island F. & D. Com.—Ninth Annual Report of the Board of Food and Drug Commissioners, Rhode Island, 1918.

Rep. South Dakota F. & D. Com.—Eighteenth Annual Report of the Food and Drug Commissioner of South Dakota, 1918.

Rep. Tennessee F. & D. Dept.—Annual Report of the Food and Drug Department, State of Tennessee, Nashville, 1918.

Rep. Therap. Res. Com.—Annual Report of Investigations of the Therapeutic Research Committee of the Council on Pharmacy and Chemistry of the American Medical Association, Chicago, 1918, v. 7.

Rep. Utah D. & F. Com.—Eleventh Biennial Report of the State Dairy and Food Commissioner of the State of Utah, Salt Lake City, 1917–1918.

Rep. Wyoming D. F. & O. Com.—Fourteenth Annual Report of the Dairy, Food, and Oil Commissioner, 1918.

Retail Druggist, Detroit, 1918, v. 25.

Rev. chim. industrielle.—La revue de chimie industrielle, Paris, 1918, v. 27.

Rev. prod. chim.—Revue des produits chimiques, Paris, 1918, v. 21.

Rocky Mountain Druggist (The), Denver, 1918, v. 32.

Schweiz. Apoth. Ztg.—Schweizerische Apotheker-Zeitung, Zürich, 1918, v. 56.

Science, New York, 1918, v. 47 and 48.

Science Progress, 1918, v. 12 and 13.

Sci. Am.—Scientific American, 1918, v. 118 and 119.

Sci. Papers Bur. Stand.—Scientific Papers Bureau of Standards, U. S. Department of Commerce, 1918, No. 328.

Semi-Ann. Rep.—Semi-Annual Report, Schimmel & Co., Miltitz, 1917, April-October.

Simmons' Spice Mill, New York, 1918, v. 41.

Southern Med. J.—Southern Medical Journal, 1918, v. 11.

Southern Pharm. J.—Southern Pharmaceutical Journal, Dallas, 1918, v. 10.

Spatula (The), Boston, 1918, v. 24 and 25.

Svensk farm. Tidskr.—Svensk farmaceutisk Tidskrift, Stockholm, 1918, v. 22.

Svensk kem. Tidskr.—Svensk kemis Tidskrift, Stockholm, 1918, v. 30.

Tech. Papers Bur. Stand.—Technologic Papers of the Bureau of Standards, U. S. Department of Commerce, 1918, Nos. 108–120.

Therap. Gaz.—Therapeutic Gazette, Detroit, 1918, v. 42.

Tr. Am. Inst. Chem. Eng.—Transactions of the American Institute of Chemical Engineers, New York, 1918, v. 11.

U. S. Naval Med. Bull.—United States Naval Medical Bulletin, 1918, v. 12.

Virginia Pharmacist (The), Richmond, 1918, v. 2 and 3.

Western Druggist (The), Chicago, 1918, v. 40.

West. Pennsylvania Ret. Drug.—Western Pennsylvania Retail Druggist, 1918.

Wis. Med. J.—Wisconsin (The) Medical Journal, Milwaukee, 1918, v. 17.

Wyoming Farm Bulletin.—University of Wyoming Agricultural College and United States Department of Agriculture cooperating, 1918, v. 7, Nos. 7, 8, 9, 10, 12; v. 8, Nos. 1, 2, 3, 4, 5, and 6.

Zentralbl. Biochem. u. Biophys.—Zentralblatt für Biochemie und Biophysik, Berlin, 1918, v. 20.

Ztschr. anal. Chem.—Zeitschrift für analytische chemie, Wiesbaden, 1918, v. 57.

Ztschr. anorg. Chem.—Zeitschrift für anorganische und allgemeine Chemie, Leipzig, 1918, v. 103.

Ztschr. exper. Med.—Zeitschrift für gesamte experimentelle Medizin, 1918, v. 7.

Ztschr. exper. Path. u. Therap.—Zeitschrift für experimentelle Pathologie und Therapie, Berlin, 1918, v. 19.

Ztschr. Immun. u. exper. Therap.—Zeitschrift für Immunitätsforschung und experimentelle Therapie, 1917, v. 26.

Ztschr. Unters. Nahr.-u. Genussm.—Zeitschrift für Untersuchung der Nahrungs- und Genussmittel, Berlin, 1918, v. 36 and 37.
Ztschr. wiss. Mikros.—Zeitschrift für Wissenschaftliche Mikroskopie, Leipzig, 1917, v. 34; 1918, v. 35.

2. TITLE ABBREVIATIONS—PHARMACOPOEIAS AND NONOFFICIAL STANDARDS.

Ph. Arg. I.—Farmacopea Nacional Argentina, primera edicón, 1898.
Ph. Austr. VIII.—Pharmacopœa Austriaca, editio octava, 1906.
Ph. Belg. III.—Pharmacopœa Belgica, editio tertia, 1906.
Ph. Brit. V.—British Pharmacopœia, 1914.
Ph. Chil. I.—Farmacopea Chilena, 1886.
Ph. Dan. VIII.—Pharmacopœia Danica, 1907.
Ph. Fenn. V.—Pharmacopœa Fennica, editio quinta, 1914.
Ph. Fr. V.—Pharmacopée Francaise, Codex Medicamentarius, 1908.
Ph. Germ. V.—Pharmacopœa Germanica, editio quinta, 1910.
Ph. Helv. IV.—Pharmacopœa Helvetica, editio quarta, 1907.
Ph. Españ. VII.—Farmacopea oficial Española, septima edicion, 1905.
Ph. Hung. III.—Pharmacopœa Hungarica, editio tertia, 1909.
Ph. Ital. III.—Farmacopea ufficale del Regno d'Italia, terza edizione, 1909.
Ph. Japon. III.—The Pharmacopœia of Japan, 1906 (English translation, 1907).
Ph. Mex. IV.—Farmacopea Mexicana, cuarta edición, 1904.
Ph. Ndl. IV.—Pharmacopea Nederlandica, editio quarta, 1905.
Ph. Norv. IV.—Pharmacopœa Norvegica, editio quarta, 1913.
Ph. Rom. III.—Pharmacopea Romana, editio tertia, 1893.
Ph. Ross. VI.—Pharmacopœa Rossica, sixth edition, 1910.
Ph. Serv. II.—Pharmacopœia Servica, editio secunda, 1908.
Ph. Suec. IX.—Pharmacopœa Svecica, editio nona, 1908.
Ph. Ven. I.—Farmacopea Venezolana, 1898.
U. S. P. IX.—Pharmacopœia of the United States, 9th Dec. Rev., 1916.
N. F. IV.—The National Formulary of Unofficial Preparations, Baltimore, 1916.
N. N. R.—New and Nonofficial Remedies, Chicago, 1919.
B. P. C.—British Pharmaceutical Codex, London, 1911.

DIGEST OF COMMENTS ON THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA AND ON THE NATIONAL FORMULARY.[1]

I. GENERAL COMMENTS.

1. LEGAL STATUS AND DEVELOPMENT.

1. PURE FOOD AND DRUG LAWS.

Anderson, William C.: A reprint of the proposals contained in the preliminary draft of a model pharmacy law prepared by the committee of the American Pharmaceutical Association which was appointed for this purpose.—Am. Druggist, 1918, v. 66, No. 9, p. 31–32.

Christensen, H. C.: A plea for the unification of standards for registration in pharmacy.—Am. Druggist, 1918, v. 66, No. 10, p. 29–31.

Morland, Robert L.: A presentation of some practical ideas with reference to the need for uniformity in pharmacy laws.—Pract. Drug. 1918, v. 36, No. 2, p. 42.

Shepardson, F. W.: A discussion of the administration of the pharmacy laws of Illinois.—J. Am. Pharm. Assoc. 1918, v. 7, p. 1076. For enforcement of the law, see Shepardson, Proc. Illinois Pharm. Assoc. 1918, v. 89, p. 101.

Woodruff, C. M.: A definition of intoxicating beverages as applied to prohibition laws, which would be satisfactory to the manufacturers of medicinal products, reads as follows: "Pharmacopœial preparations. The act shall not be construed to prevent the distribution of any alcoholic compound, preparation, or remedy containing drugs or medicines which does not contain more alcohol than is necessary for the legitimate purpose of extraction, solution, or preservation, and which contains drugs in sufficient quantities to medicate such compounds to make them medical preparations and to render them unfit for use as a beverage. Nor does it prohibit the sale of toilet preparations or compounds which possess alcohol and are unsuitable for beverages."—Proc. Am. Drug Mfg. Assoc. 1918, p. 67.

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[1] Manuscript submitted for publication Feb. 9, 1921.

Anon.: A reprint of new postal regulations governing the shipment of liquids and oils by mail.—Am. Perf. 1918, v. 13, p. 114.

Anon.: A note calling attention to the use of bay rum, Jamaica ginger, and wine of beef and iron as beverages.—Bull. Pharm. 1918, v. 32, p. 222.

Anon.: The Court of Appeals of New York has rendered a decision against the Health Department of New York with respect to the Goldwater formula-disclosure ordinance.—Apothecary, 1918, v. 30, No. 11, p. 43.

2. SALE AND USE OF POISONS.

Anon.: Attention is called to the danger in carelessly dispensing poisons in bottles bearing other labels without removing the old and attaching a new label.—Chem. & Drug. 1918, v. 90, p. 723.

Anon.: An editorial calls attention to the unsatisfactory regulations concerning the sending of poisons through the mails. It is stated that much inconvenience is caused on account of the fact that there are no definite standards for a poison.—Bull. Pharm. 1918, v. 32, p. 489.

Anon.: A reprint of the new South African poison schedule.—Chem. & Drug. 1918, v. 90, p. 4.

Woolley, S. W.: A paper discussing the effect of the British pharmacy act on the number of deaths due to poisoning.—Chem. & Drug. 1918, v. 90, p. 914–918.

3. SALE AND USE OF NARCOTIC DRUGS.

Beal, James H.: The effect of the Harrison Act on the sale and consumption of habit-forming drugs in the United States.—Drug. Circ. 1918, v. 62, No. 1, p. 13–16; Southern Pharm. J. 1918, v. 10, p. 532–534, 568–570.

Anon.: The ban on the refilling of narcotic prescriptions was lifted during the epidemic of influenza because of the difficulty of securing prompt medical attention.—Bull. Pharm. 1918, v. 32, p. 487.

Anon.: An article giving the opium regulations which will be put into force in the Dutch East Indies.—Pharm. Weekblad, 1918, v. 55, p. 1675–1677.

Woodruff, C. M.: A reprint of 13 resolutions concerning habit-forming drugs adopted by the National Drug Trade Conference at its meeting in Baltimore January 4, 1918.—Proc. Am. Drug Mfg. Assoc. 1918, p. 113–114.

Anon.: A commentary on the new English cocaine and opium regulations.—Chem. & Drug. 1918, v. 90, p. 34–35.

4. SALE AND USE OF HOUSEHOLD REMEDIES.

Cramp, Arthur J.: A discussion of modern advertising in its relation to the nostrum evil.—Am. J. Public Health, 1918, v. 8, p. 756–758.

Anon.: A discussion of the Illinois Appellate Court's definition of domestic remedies.—Drug. Circ. 1918, v. 62, p. 267–268.

Anon.: According to a law passed in 1917, and interpretations thereof recently promulgated by the Philippine Health Service, all simple and pharmaceutical preparations, except those used exclusively for cosmetic purposes, must be labeled on the bottle or immediate container with a quantitative and qualitative formula in English.—Sci. Am. 1918, v. 118, p. 67.

McGill, A.: Tables are given showing the alcohol content of a large number of patent and proprietary remedies offered for sale in Canada.—Bull. Lab. Inl. Rev. Dept. Canada, 1918, No. 410, p. 1–7.

Monteith, J. D.: The analyses of more than 100 cough syrups showed that they contained chloroform in amounts ranging from a fraction of 1 minim to 5 minims per fluid ounce, averaging 2 to 3 minims.—Apothecary, 1918, v. 30, No. 4, p. 36.

5. DRUG INSPECTION WORK.

Anon.: A recent inspection of 469 drug stores in the State of Kentucky showed an average efficiency of only 71.09 per cent.—Drug. Circ. 1918, v. 62, No. 2, p. 66.

Howard, Chas. D.: Of 78 samples of drugs examined, 36 were rejected.—Rep. New Hampshire Bd. Pharm. 1918, p. 84.

Anon.: Of 59 samples of drugs examined, 15 were rejected.—Bull. Vermont Bd. Health, 1918, v. 18, Nos. 3 and 4; v. 19, No. 1.

Engelhardt, H.: Of 6.282 shipments of drugs and chemicals examined, only 42 were rejected because of poor quality.—Proc. Maryland Pharm. Assoc. 1918, p. 80.

Penniman, W. B. D.: Of 393 samples of drugs examined, 43 were rejected.—Rep. Maryland Bd. Health, 1915, p. 174.

van Buskirk, L. H.: Of 491 samples of drugs examined, 154 were rejected.—Ohio Public Health J. 1918, v. 9, p. 44, 84, 134, 181, 230, 276, 325, 371, 432, 485, and 532.

Eskew, Harry L.: Of a total of 94 samples of different drugs and medicinal preparations examined, 64 were illegal.—Rep. Tennessee F. & D. Dept. 1918, p. 20.

Frary, Guy G.: Of a total of 55 drugs and pharmaceutical preparations examined, 24 were rejected.—Rep. South Dakota F. & D. Com. 1918, p. 62–64.

Bailey, E. M.: Of 21 samples of drugs examined, 9 were rejected.—Rep. Connecticut Agric. Exper. Sta. 1918, p. 242.

McLaughlin, Allan J.: Of 794 drugs examined, 145 were not of U. S. P. quality.—Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.

Lea, E. J.: Of 102 samples of drugs examined, 61 were rejected.—Rep. California Bd. Health, 1918, p. 167.

Todd, A. R.: Of 528 samples of drugs, comprising 66 different drug products, 226, or 42 per cent. were condemned.—Rep. Michigan D. & F. Com. 1918, p. 87.

Éwe, G.: Of 131 samples of drugs examined, 18 were rejected.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 109.

Snapp, E. L.: Of 134 samples of drugs, chemicals, and medicinal preparations analyzed, 50 were found to be adulterated or misbranded.—Proc. Kentucky Pharm. Assoc. 1918, p. 44.

Cheatham, T. A.: It is reported that, with few exceptions, all the drugs, medicines, and chemicals inspected conformed to the requirements of the State Food and Drug Law.—Rep. Georgia Dept. Agric. 1918, p. 43–46.

Anon.: Three samples of drugs examined were rejected.—Rep. Wyoming D. F. & O. Com. 1918, p. 11.

Anderson, George A.: One small shipment of kamala from abroad was of inferior quality on account of the presence of a reddish sand which caused an ash yield of 46.45 per cent. Another sample yielded 26.65 per cent of ash.—Proc. N. W. D. A. 1918, p. 231 and 235.

Anderson, George A.: One lot of horehound examined contained an excess of approximately 40 per cent of stems.—Proc. N. W. D. A. 1918, p. 235.

Anderson, George A.: Three shipments of iron cacodylate examined were not sufficiently soluble and yielded a dark red instead of yellow solution.—Proc. N. W. D. A. 1918, p. 230.

Todd, A. R.: Of 18 samples of proprietary preparations examined, 7 were not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

Woutman, W. F.: Studies from the laboratory of the Imperial Pharmaceutical Storehouse at Amsterdam. A report of the deviations from the Ph. Ndl. requirements for 66 drugs.—Pharm. Weekblad, 1918, v. 55, p. 1165–1172.

van der Harst, J. C., and Koers, C. H.: The results obtained in the analysis of a number of commercial samples of bleaching powder, soda, pepper, and soap are given.—Pharm. Weekblad, 1918, v. 55, p. 578–579.

Richmond, H. D., et al.: A report on the examination of 219 samples of saccharin tablets, the manufacture of which is controlled in

England. Forty-eight per cent conformed with the standard and the remainder were within 10 per cent. One hundred and sixty-eight uncontrolled samples were far below the standard.—Analyst, 1918, v. 43, p. 402–404.

Anon.: The examination of several proprietary remedies, medicated wines, and infant soothing syrups is reported.—Bull. New Hampshire Bd. Health, 1918, v. 6, p. 25–30.

6. PUBLICATION AND CONTROL.

Editorial: National legislation should be enacted whereby the Federal Government should have control of the publication of the U. S. P. and N. F., as the Federal printing department is thoroughly equipped for the proper handling of these books, and the various unnecessary profits as a result of the system of publication under the present let-sub-let et al arrangement would thereby be eliminated.—Nat. Drug Clerk, 1917, v. 5, p. 140.

Anon.: The matter of Federal control of the U. S. P. and N. F. and other pharmaceutical affairs should be of vital concern to the United States authorities, as it has been proven that the drug feature of the food law is constitutional, and that many of the States have been and are amending their State laws to meet the requirements of the drug end of the national law.—Nat. Drug Clerk, 1916, v. 4, p. 181.

7. THE PHYSICIAN AND THE PHARMACOPŒIA.

Lascoff, J. L.: In a report of the Committee on U. S. P. and N. F. Propaganda of the New York State Pharmaceutical Association, it is stated that the prescribing of U. S. P. and N. F. preparations by physicians has greatly increased during the past decade.—Proc. New York Pharm. Assoc. 1918, p. 89–90.

8. NATURE AND PROGRESS OF REVISION.

Kraemer, Henry: A revision of the U. S. P. IX should be prepared by the present revision committee in order to expedite the work of revision, and in order to secure the widest consideration and most effective cooperation by those who are most deeply concerned.—Drug. Circ. 1918, v. 62, p. 203.

Arny, H. V.: A defense of the present method of U. S. P. revision.—Drug. Circ. 1918, v. 62, p. 202–203.

Wood, H. C., jr.: A defense of the present system of pharmacopœial revision.—Drug. Circ. 1918, v. 62, p. 155–156.

Scoville, W. L.: An enumeration of the advantages and disadvantages of the present method of U. S. P. revision.—Drug. Circ. 1918, v. 62, p. 156 and 178.

Hubbard, W. S.: The next revision committee should have a greater number of chemists of authority upon it.—Drug. Circ. 1918, v. 62, p. 312–314.

Raubenheimer, Otto: An explanation of the present machinery of pharmacopœial revision.—Drug. Circ. 1918, v. 62, p. 154.

Sollmann, Torald: A proposed plan for facilitating the work of pharmacopœial revision is outlined in detail.—Drug. Circ. 1918, v. 62, p. 256–257.

Sayre, L. E.: The work on standards should be continuous and should be carried on by a standing committee which should follow the method and adopt the spirit of the Agricultural Chemists.—Drug. Circ. 1918, v. 62, p. 256.

Culbreth, David M. R.: The revision of the Pharmacopœia should be largely entrusted to the chairman, the committee, and a few liberally paid working assistants.—Drug. Circ. 1918, v. 62, p. 255–256.

Dohme, A. R. L.: It is suggested that the present committee of revision is unnecessarily large and cumbersome and should be reduced in size to about twenty-five members. Manufacturing pharmacists and chemists should be more extensively represented on the revision committee.—Drug. Circ. 1918, v. 62, p. 254–255.

Coblentz, Virgil: The chairmen of the various subcommittees of revision should be made permanent, in order that systematic research work may be carried on during the interim between revisions.—Drug. Circ. 1918, v. 62, p. 254.

LaWall, Chas. H.: It is suggested that the chairman of the revision committee should devote his entire time to the work of revision, and that there should be established under his direction a small permanent research laboratory, employing workers familiar with such special lines as pharmacodynamics, drug assays, volatile oils, chemicals, etc.—Drug. Circ. 1918, v. 62, p. 155.

Wiley, Harvey W.: A more efficient system of revision than that heretofore practiced is desirable. It is suggested that all analytical work in connection with the revision of the Pharmacopœia be checked up by the Drug Division of the Bureau of Chemistry of the Department of Agriculture.—Drug. Circ. 1918, v. 62, p. 154–155.

Cook, E. F.: A discussion of methods which have been suggested for improvements in the revision of the Pharmacopœia.—Am. J. Pharm. 1918, v. 90, p. 588–591.

Thum, John K.: The suggestion that continuous committees be established to carry on cooperative work, as is done by the Association of Official Agricultural Chemists, is a good one in the opinion of the author.—Drug. Circ. 1918, v. 62, p. 226.

Scoville, Wilbur L.: A discussion of some tendencies shown by revisers of the Pharmacopœia.—Drug. Circ. 1918, v. 62, p. 441–442 and 450.

Philadelphia Drug Exchange: Opinions of the Philadelphia Drug Exchange with respect to the present method of U. S. P. revision and suggested changes in the manner of revision are presented.—Drug. Circ. 1918, v. 62, p. 203–226.

2. SCOPE.

1. NATURE AND CONTENT OF THE PHARMACOPŒIA.

Bührer, C.: A brief review of the origin and development of the U. S. P., with special reference to the U. S. P. IX.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 7–10. See also E. H. Madsen, Arch. Pharm. Chem. 1918, v. 25, p. 83–85; J. J. Hofman, Pharm. Weekblad, 1918, v. 55, p. 537–547.

Schelenz, Hermann: In its outward appearance (stiff linen binding instead of soft leather binding of the former edition, a question of the war perhaps) the U. S. P. is a little behind its predecessor with respect to appropriateness, yet with reference to its value the volume is what we have become halfway accustomed to expect in American objects. The monographs for individual items would, perhaps, not stand the test of our criticism in some instances. There is no doubt that the book nevertheless brings honor to its many masters, among them a great many unrecognized Germans, and fulfills the requirements of their country.—Pharm. Zentralh. 1917, v. 58, p. 285.

Ruenzel, Henry: Some changes in the Pharmacopœia from the eighth to the ninth revision.—Proc. Wisconsin Pharm. Assoc. 1918, p. 58–63.

Smith, F. A. Upsher: Suggestions for changes in the preparations of the U. S. P. and N. F. for the conservation of glycerin, sugar, and alcohol.—Proc. Minnesota Pharm. Assoc. 1918, p. 151–177.

2. NOMENCLATURE.

Beille, L.: A book review of a volume by L. Bruntz and Jaloux states that this work is a methodical compilation of the names of all plant drugs contained in the various editions of the pharmacopœias of the world, preceded by a general discussion of these pharmacopœias.—Bull. soc. pharm. Bordeaux, 1918, v. 56, p. 237–239.

Farwell, O. A.: Suggested changes in the botanical nomenclature of the U. S. P. IX.—Drug. Circ. 1918, v. 62, p. 535–536.

Starke, Eduard: Drug names and their origin. An alphabetical list of drug names showing their origin.—Pharm. Zentralh. 1917, v. 58, p. 119–124, 131–135, 143–147, 158–161, 182–186, 196–199, 205–210.

Kroeber, Ludwig: An alphabetical list of some German plant names, giving their origin and synonyms.—Pharm. Zentralh., 1917, v. 58, p. 179–182, 210–214.

Voss, Andres: Comments on some of the plant names mentioned in Kroeber's article on nomenclature of plant drugs.—Pharm. Zentralh. 1917, v. 58, p. 446.

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den Besten, G., and Sluyters, A.: The conclusions from 225 tests made at the Pharmacological Institute of the University of Utrecht are that a given amount of atropine is able to neutralize the action of physostigmine in the proportions of 1 to 1,500 up to 1 to 1,500,000.—Nederlandsch Tijdschrift voor Geneeskunde, Amsterdam, 1917, v. 2, p. 1137, through J. Am. M. Assoc. 1918, v. 70, p. 66.

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Anon.: In order to aid in the transition from the customary system of weights and measures to the metric system, the United States Bureau of Standards is preparing a circular on weights and measures for the pharmacist and physician. The bureau has also furnished the committee on revision of the Pharmacopœia with a statement on the subject of the fineness of drug powders, giving definitions of the several degrees of fineness and the methods to be used in their determination.—Meyer Bros. Drug. 1916, v. 37, p. 132.

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Year.	Total.	Above.	Below.	Per cent above.
eport of—				
1909	395	313	82	79.3
1910	340	291	49	85.6
1911	263	224	39	85.1
1912	298	235	63	78.8
1913	382	264	118	69.1
1914	286	221	65	77.2
1915	133	98	35	73.6
1916	214	156	58	72.9
1917	172	147	25	85.3
1918	131	113	18	86.8

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Eder, R.: An address in which colloidal phenomena are reviewed id in which special reference is made to the modern colloidal prepa-tions of silver and other metals used in medicine.—Schweiz. poth.-Ztg. 1918, v. 56, p. 369–374, 393–398, 408–410, 417–420.

Morison: A formula is given for the preparation of bismuth-iodo-rm paste (B. I. P. P.). Methods of preparation, sterilization, and eservation are described. An abstract.—Chem. & Drug. 1918, v. 90, 147.

Terrey, H.: A fat-free suppository base is made by mixing kaolin ith a decoction of Irish moss.—Pharm. Ztg. 1918, v. 63, p. 246, rough Chem. Zentralbl. 1918, v. 2, p. 214.

Rothéa, F.: Experimental data relative to the preparation of sup-ositories by the use of mixtures of fatty acids and paraffin are pre-nted.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 199–203.

Richet, Brodin, and Saint-Girons: Antiseptic inhalations for the eatment of tuberculosis are prepared by passing air through liquid raffin containing antiseptics in solution. An abstract.—J. pharm. chim. 1918, v. 17, p. 212.

5. METHODS OF ADMINISTRATION.

Pond, Samuel E., and Price, Weston A.: Researches on electrolytic edication, with special reference to its general aspects. A bibliog-phy of 12 pages is included.—J. Nat. Dental Assoc. 1918, v. 5, p. 4–867, through Chem. Abstr. 1918, v. 12, p. 2206.

Tomasiselli, Giovanni: A comprehensive article dealing with the oduction of purgation by hypodermic medication.—Arch. farmacol. er. 1918, v. 26, p. 25–32, 54–64, 65–83.

Rosenthal, Georges: A concentrated solution of sucrose is recom-ended as a general excipient for intravenous injections of irritat-g substances, such as the cyanides of gold and mercury, quinine, c.—Compt. rend. soc. biol. 1918, v. 81, p. 919–920.

II. INTERNATIONAL STANDARDS.

1. THE EVOLUTION OF UNIFORMITY IN PHARMACOPŒI STANDARDS AND STANDARDS FOR POTENT MEDICAMENTS.

2. FOREIGN PHARMACOPŒIAS.

Buhrer, C.: A list of the various editions, with dates, of t pharmacopœias official in different countries. The list is taken fr Bruntz et Jaloux, *Les plantes officinales*.—Schweiz. Apoth.-Ztg. 19 v. 56, p. 515–517.

Carcano, Luigi: Comments on the new military pharmacopœia Italy.—Boll. chim.-farm. 1918, v. 57, p. 64–66.

1. BRITISH.

Anon.: Alterations and amendments to the Ph. Brit. authoriz by the General Council of Medical Education and Registration the United Kingdom, March, 1918.—Chem. & Drug. 1918, v. 90, 262.

BRITISH PHARMACEUTICAL CODEX.

Anon.: A reprint of formulas for the addendum to the Briti Pharmaceutical Codex for 1918.—Chem. & Drug. 1918, v. 90, p. 6

2. GERMAN.

Wiekboldt: A discussion of the influence of the German pharm copœia on the development of the commerce in drugs and che icals.—Pharm. Zentralh. 1917, v. 58, p. 367–371.

Lorenzen, J.: German equivalents for a number of pharma pœial titles are presented, with the view of having them introduc into the new edition of the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, 5 and 93–94. See also Schenk, ibid. p. 58, and M. Weger, p. 93.

Arzneibuch Kommission: The Pharmacopœial Commission of t German Pharmaceutical Society has sent to its members the follo ing questionnaire for the purpose of obtaining their views on t revision of the German pharmacopœia:

I. SELECTION OF ITEMS TO BE INCLUDED IN THE PHARMACOPŒIA.

1. Shall the number of items selected for admission to the Pharm copœia be as comprehensive as possible?
2. What items do the members desire especially to have admitt to the Pharmacopœia?
3. Apart from the galenical preparations, shall it be the policy admit only such materials as can easily be characterized either chemical or physiological methods and for which proper tests can devised?

4. What policy shall be followed in selecting titles for the items dmitted to the Pharmacopœia? If both the trade name and scienific name for a substance is given, shall the trade name be placed rst in large print and the scientific name be given as a synonym in maller type, or vice versa?

5. Is the recognition of dietetic remedies, like malt extract, deirable?

6. Shall veterinary sera be admitted?

II. CHEMICAL TESTS.

1. What experience, if any, have you had in testing of fats, wines, on preparations, tinctures, extracts, alkaloid-containing drugs, or n the identification of alkaloids? Have you any suggestions to ffer for the simplification of the present methods?

2. In what cases should volumetric methods be replaced by gravietric methods?

3. Can a saving of space be realized by describing the frequently ecurring standard tests for such substances as calcium, magnesium, arium, iron, copper, arsenic, sulphuric acid, nitric acid, etc., in the reface and merely state in the text that the preparation shall be ree from calcium, magnesium, etc.?

4. Is it desirable to eliminate or define in the preface or in the ext such obscure expressions as "opalescence," "slight turbidity," faintly acid reaction"? As an example, it might be stated that palescence is the degree of turbidity which results when a definite mount of a solution of sodium chloride of definite strength is dded to a definite amount of a solution of silver nitrate of a definite ilution and observed at the end of a specified number of minutes.

5. Shall the more important tests be emphasized by special type?

6. Shall the publication of standard tests for adeps and vinum be ecommended?

7. Shall the use of N/100 solutions for test purposes be disconnued?

III. TESTS FOR VEGETABLE DRUGS.

1. In what cases are changes, corrections, or simplifications of the resent methods desirable?

2. Shall a standard test for cut drugs be prescribed?

3. Is it desirable to introduce into the Pharmacopœia detailed otanical and anatomical descriptions for powdered drugs?

4. To which shall the greater consideration be given, macro or icro chemical tests?

5. Shall specifications relative to the weights of seeds be given, as ell as those defining size?

6. Are specifications for the ash yield of drugs sufficiently reliab to be made a requirement?

7. Are specifications for the yield of extractive matter of sufficie value to be included?

8. Is it desirable to change the manner of designating the numbe of sieves for use in the preparation of powdered drugs?

IV. PREPARATION AND STANDARDS FOR GALENICALS.

1. For which galenical preparations should the standards changed?

2. In the preparation of which tinctures is percolation preferab to maceration, or should the process of percolation be prescribed f the preparation of all tinctures?

3. For which galenical preparations shall chemical or physi logical tests be prescribed?

4. Shall extract and ash requirements be prescribed in the case tinctures and extracts?

V. PHYSIOLOGICAL TESTS.

1. Is the value of physiological methods for the testing of drug so well established that methods of this nature should be included i the Pharmacopœia?

2. For which drugs and preparations should physiological tests provided?

3. Shall the methods for carrying out physiological tests be d scribed in detail?

4. By whom, and where, shall physiological tests be made?

5. Are there any available data which show the period of time f which a test certificate for a preparation tested by a physiologic method is a true indication of the therapeutic activity of the prepa ration?

VI. SPECIAL SECTIONS OF THE PHARMACOPŒIA.

1. Shall the table of specific gravities be extended to include greater number of items?

2. Shall the synonym vocabulary be retained?

3. Is it desirable to include a table of antidotes?

4. Shall the maximum doses for children be given?

5. Are there any changes or additions which should be recom mended for the table of maximum doses?—Ber. deutsch. pharm Gesellsch. 1918, v. 28, p. 145–148.

Frerich, G., et al.: Comments on the Ph. Germ. V, with some sug gestions and recommendations for changes in the next edition.—Apoth.-Ztg. 1917, v. 32, p. 113–115, 127–128, 137–138, 145–146, 154

56, 201–203, 217–219, 251–252, 256–258, 282–283, 314–315, 323–324, 35–336, 341–342, 347–348, 377–378, 390–391, 464–466, 471–472, 480–82, and 493–494, through Chem. Zentralbl. 1918, v. 89, part 1, p. 231.

Deutsche Pharmaceutische Gesellschaft: Recommendations of the harmacopoeial Commission of the German Pharmaceutical Society the Imperial Board of Health for changes and improvements in e Ph. Germ.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 192–96 and 236–384.

Lefeldt, M.: It is recommended that the following be deleted from e Ph. Germ.: Adeps suillus, Aether bromatus, Aqua cresolica, garicinum, Cortex Simarubae, Extractum Simarubae fluidum, Folia lthaeae. The following are mentioned for introduction into the w edition: Adalin, Atophan, Baryum sulfuricum, Bismutum tri- romphenylicum, Camphora artificialis, Codeinum, Coffeinum-Na- ium benzoicum, Colchicin, Eucalyptol, Herba Millefolii, Natrium nzoicum, Natrium diaethylbarbituricum, Oleum Bergamottae, leum Eucalypti, Peptonum siccum, Sajodin.—Ber. deutsch. pharm. esellsch. 1917, v. 27, p. 157–193.

Lucker, Ed.: Suggestions are made for changes in many of the alenical preparations of the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, 169–170.

Anon.: A summary of suggestions for the revision of the Ph. erm. Comments on individual items are included.—Pharm. Zen- alh. 1918, v. 59, p. 206–208, 212–213.

Ziegler, J.: Recommendations are made for changes and improve- ents in the methods of preparation and tests of the Ph. Germ.— poth.-Ztg. 1918, v. 33, p. 162–163.

Stollé, R.: A number of changes are suggested for consideration the revision of the Ph. Germ.—Ber. deutsch. pharm. Gesellsch. 918, v. 28, p. 628–629.

Mossler, G.: After certain general suggestions relative to testing, ecoloration, and packing of bandages, certain assay requirements r these products are recommended for introduction into the new lition of the Ph. Germ.—Ztschr. österr. Apoth.-Ztg. 1918, v. 56, p. 53–156, through Chem. Zentralbl. 1918, v. 2, p. 228–229.

Tunmann, O.: It is recommended that qualitative microchemical ethods of testing be included in the new German pharmacopœia, ch tests to be restricted mainly to drugs, the methods to be so mple that the use of the microscope will be unnecessary and that ey will involve only sublimation on the asbestos plate.—Apoth.- tg. 1918, v. 33, p. 295–296, 301, 307, 311, and 315.

Enz, Karl: Suggestions for improvements in the methods of test- g certain chemical and galenical preparations of the Ph. Germ.— üdd. Apoth.-Ztg. 1918, v. 58, p. 208, through Chem. Zentralbl. 1918, . 89, part 2, p. 468.

Kroeber, Ludwig: A discussion of the desirability of introducin tests for glassware in the forthcoming German pharmacopœia. Sev eral tests for alkalinity are mentioned.—Pharm. Zentralh. 1918, 59, p. 223–227 and 233–237; Chem. Zentralbl. 1918, v. 2, p. 759.

Fuhner, H., and Straub, W.: A discussion of the advisability introducing physiological assays into the next edition of the Pl Germ.—Deutsch. med. Wchnschr. 1918, v. 44, p. 1016–1017, throug Chem. Zentralbl. 1918, v. 89, part 2, p. 759.

Jermrich, Wilh.: Recommendations are made for changes in th standard solutions of the Ph. Germ. and in the apparatus directe to be used in melting-point determinations.—Apoth.-Ztg. 1918, v. 3 p. 195.

Braun, C.: Some critical notes on the standard solutions of th German pharmacopœia, with changes recommended for the new ed tion.—Apoth.-Ztg. 1918, p. 381.

Richter, E.: Suggestions for the new edition of the Germa pharmacopœia with reference to the storage of chlorine water, th preparation of tincture of iodine, and the testing of ether fo anæsthesia are presented.—Apoth.-Ztg. 1918, v. 33, p. 191–192.

Pabst: The tincture of iodine of the Ph. Germ. V is stated to b unsuitable. The addition of KI is recommended.—Apoth.-Ztg. 191 v. 32, p. 626, through Chem. Zentralbl. 1918, v. 89, part 1, p. 232.

Anon.: A book review of the fourth edition of a volume publishe by the Deutscher Apotheker-Verein, Berlin, entitled *Ergänzungsbuch zum Arzneibuch fur das Deutsche Reich.*—Pharm. Zentral 1917, v. 58, p. 11.

3. FRENCH.

Anon.: A copy of a decree promulgated by the Minister of Publi Instruction of France on November 4, 1918, and December 24, 191 in which the members of the new Codex Commission are named.—Bull. Assoc. Gén. Syn. Pharm. France, 1918, v. 21, p. 185.

4. SWEDISH.

Engfeldt, N. O.: An investigation of the form in which iodin exists in iodine soap of the Ph. Svec.—Svensk farm. Tidskr. 191 v. 22, p. 309–314, 325–326, and 341–347.

5. DUTCH.

Anon.: An article calling attention to the fact that the work o the fourth revision of the Dutch pharmacopœia has been complete and it is expected that it will become official in January, 1919.—Pharm. Weekblad, 1918, v. 55, p. 1605.

Schoorl, N., and Regenbogen, A.: In view of the preparation of new edition of the Dutch pharmacopœia, measurements have bee de of the density of mixtures of ethyl alcohol and water at 15° C. e authors recommend the table of the U. S. Bureau of Standards affording the most accurate values of the densities of alcohol-ter mixtures.—Pharm. Weekblad, 1918, v. 55, p. 390–409.

III. COMMENTS ON OFFICIAL ARTICLES.

ACACIA.

Bergendorff, Fredrik: The possibility of employing substitutes for m acacia in medicinal preparations containing the latter is dis-ssed. The article is illustrated with a number of formulæ.—ensk farm. Tidskr. 1918, v. 22, p. 117–119.

Pfrenger, M.: A sample of acacia examined was found to contain, addition to starch, some sodium carbonate, thus making the de-tion of starch with iodine solution impossible. Recommendation made that the new Ph. Germ. make provisions for detecting adul-ration of this nature.—Apoth.-Ztg. 1918, v. 33, p. 195; Chem. ntralbl. 1918, v. 2, p. 153.

ACETANILIDUM.

Anderson, George A.: Supplies of acetanilid are plentiful and the ality is satisfactory.—Proc. N. W. D. A., 1918, p. 238.

Stollé, R.: A test for acetanilid given in the Ph. Germ. reads: The saturated solution must not change the color of dilute ferric loride solution (1+9) (aniline salts, phenols, phenyldimethyl-razolone). It is pointed out that ferric chloride is a regeant for etic acid and not for aniline salts.—Ber. deutsch. pharm. Ge-llsch. 1918, v. 28, p. 628.

Deutsche Pharmaceutische Gesellschaft: In the description of e Ph. Germ. method for the determination of the melting point acetanilid, it should be mentioned that the material should be ied before making the test.—Ber. deutsch. pharm. Gesellsch. 1918, 28, p. 372.

Mayrhofer, Adolf: Notes on microchemical methods for the sting of acetanilid, acetphenetidin, antipyrine, and pyramidon.—schr. allgem. österr. Apoth.-Ver. 1918, v. 56, p. 39–41, 47–48, and –60, through Chem. Zentralbl. 1918, v. 89, part 1, p. 1197.

Tunmann, O.: Methods for the identification of veronal, acet-ilid, salicylic acid, and phenacetin are described.—Apoth.-Ztg. 17, v. 32, No. 45–46, through Pharm. Zentralh. 1917, v. 58, p. 1–484.

Salkover, B.: A method is described for the determination of lol and acetanilid, likewise salol and phenacetin, in mixtures con-ining these substances.—Südd. Apoth.-Ztg. 1917, v. 57, p. 484, rough Pharm. Zentralh. 1917, v. 58, p. 587.

Todd, A. R.: One sample of acetanilid pills examined was standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

ACETONUM.

Hibbert, Harold: A review of industrial developments relati to the manufacture of acetone and acetic acid.—Chem. Met. Er 1918, v. 19, p. 397–400, through Chem. Abstr. 1918, v. 12, p. 2324.

Higgins, C. A.: A brief description of the process employed the Hercules Powder Co. for the production of acetone, keton and acetate derivatives from kelp.—J. Ind. & Eng. Chem. 191 v. 10, p. 858–859.

Fernbach, A.: British patent No. 109,969 describes the preparati of acetone by fermentation.—Chem. Abstr. 1918, v. 12, p. 155.

Freudenheim, M. E.: A study of the reaction of acetone vapo with lime heated to 350 to 630° C.—J. Phys. Chem. 1918, v. 2 p. 184–193.

Kolthoff, I. M.: An investigation of methods for the detecti of acetone. The Fabinyi-Frommer reaction, in which 10 cub centimeters of solution are warmed to 70° with 1 gram of sol potassium hydroxide and 10 drops of salicyl aldehyde, is stated to the most sensitive test.—Pharm. Weekblad, 1918, v. 55, p. 102 1029.

Field, Allan J.: A report of an investigation of methods for th determination of acetone in methyl alcohol. The Robineau ar Rollin's method as modified by L. F. Kebler was found to give th most accurate results.—J. Ind. & Eng. Chem. 1918, v. 10, p. 552–55

Anderson, George A.: One shipment of acetone examined was U. S. P. quality, except that it was 2.5 per cent low in strength.-Proc. N. W. D. A. 1918, p. 230.

ACETPHENETIDINUM.

Tahara, R., and Matsuo, J.: A description of a process for th manufacture of phenacetin from p-hydroxynitrophenol.—J. Phar Soc. Japan, 1918, No. 437, p. 540–541.

Powell, A. D.: A method for the estimation of phenacetin ar other p-aminophenol derivatives by means of hypochlorous acid described. The method is based on the reaction obtaining between hypochlorite and a salt of p-aminophenol, as: $HOC_6H_4NH_2.HCl$- $4Cl=O:C_6H_4NCl+4HCl$.—Analyst, 1919, v. 44, p. 22–25.

Mayrhofer, Adolf: Notes on the microchemical methods for th testing of acetanilid, acetphenetidin, antipyrine, and pyramidon.-Ztschr. allgem. österr. Apoth.-Ver. 1918, v. 56, p. 39–41, 47–48 ar 57–60, through Chem. Zentralbl. 1918, v. 89, part 1, p. 1197.

Tunmann, O.: Methods for the identification of veronal, acetanilid, alicylic acid, and phenacetin are described.—Apoth.-Ztg. 1917, v. 2, No. 45–46, through Pharm. Zentralh. 1917, v. 58, p. 481–484.

Salkover, B.: A method is described for the determination of salol nd acetanilid, likewise salol and phenacetin in mixtures containing hese substances.—Südd. Apoth.-Ztg. 1917, v. 57, p. 484, through harm. Zentralh. 1917, v. 58, p. 587.

Snapp, E. L.: Of three samples of phenacetin tablets examined, ne was rejected.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

Todd, A. R.: One sample of phenacetin examined was of standard uality.—Rep. Michigan D. & F. Com. 1918, p. 87.

ACIDUM ACETICUM.

Anon.: The preparation of acetic acid from acetylene. Acetylene converted into acetaldehyde by the aid of sulphuric acid and merury. The acetaldehyde is oxidized to acetic acid in the air by the se of a nickel catalyst.—Elektrochem. Ztschr. 1918, v. 39, p. 170, rough Science Abstracts, 1918, v. 21B, p. 292.

Dreyfus, H.: British patent No. 110,545 describes the preparation f acetic acid by the oxidation of acetaldehyde vapor by air or an xygen-containing gas.—Chem. Abstr. 1918, v. 12, p. 484.

Hibbert, Harold: A discussion of industrial developments relatg to the manufacture of acetic acid and acetone.—Chem. Met. Eng. 918, v. 19, p. 397–400, through Chem. Abstr. 1918, v. 12, p. 2334.

Enz, K.: The sublimate test of E. Schmidt is recommended for e detection of formic acid in acetic acid. The method of the Ph. al. is recommended for the detection of sulphur acids.—Südd. poth.-Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, . 350.

Munn, W. F.: The determination of acetic acid in acetates by stillation with phosphoric acid is described.—J. Ind. & Eng. Chem. 918, v. 10, p. 550.

ACIDUM ACETYLSALICYLICUM (NONOFFICIAL).

Anon.: It is suggested that the name aspirin was invented from e syllables contained in the German name for acetylsalicylic acid, z. "acetylspiraeasäure."—Am. Druggist, 1918, v. 66, No. 11, p. 46.

Tsakalotos, D. E., and Horsch, S.: An investigation of the effect the presence of salicylosalicylic acid upon the solidification of pirin in the form of concentric rings.—Bull. soc. chim. France, 918, v. 23, p. 16–18.

Anon.: The following test is suggested for the new edition of the h. Germ.: Acetylsalicylic acid should not give a violet color with one drop of dilute ferric chloride solution (1:24).—Pharm. Zentral 1918, v. 59, p. 207.

Deutsche Pharmaceutische Gesellschaft: The Ph. Germ. test f the detection of free salicylic acid in acetyl-salicylic acid is stated t be too severe. It should read: "With 20 cubic centimeters of wate etc., a violet color should not develop at once when a drop of dilu ferric chloride solution (1:24) is added."—Ber. deutsch. phar Gesellsch. 1918, v. 28, p. 372.

Ziegler, J.: The Ph. Germ. test for free salicylic acid in acetyl-al cylic acid appears to be too severe, since the solution of a high-gra product, when treated with dilute ferric chloride solution (1:24 takes on a slightly violet color after a short time. The directio should, therefore, read "* * * must not become colored viol immediately by the addition of one drop of dilute ferric chlori solution."—Apoth.-Ztg. 1918, v. 33, p. 162.

Lefeldt, M.: The requirements of the Ph. Germ. for acetylsalicyl acid are stated to be too severe. It is suggested that a slight viol color should be permitted in the ferric chloride test for free salicyl acid.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 158.

Enz, K.: It is recommended that a slight violet coloration be pe mitted in the Ph. Germ. test for free salicylic acid in acetylsalicyl acid.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. Ze tralh. 1918, v. 59, p. 350.

Grau, Charles A: Tests for the identity and purity of aspirin a given. A quantitative method for the evaluation of the acid is al described.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 73-80.

Anon.: A new test for the detection of novaspirin when mix with aspirin is said to be based on the fact that caustic soda pr duces a yellow color with novaspirin, while it remains colorless wi aspirin. The greater the amount of novaspirin present, the deep will be the color. If solutions are checked with known standar the amount of novaspirin in the mixture can be approximately d termined.—Apothecary, 1918, v. 30, No. 1, p. 36.

Leech, Paul N.: A report of an examination of American-ma acetylsalicylic acid. The melting point and presence or absence free salicylic acid were determined and other tests made in accor ance with the requirements of *New and Non-Official Remedi 1917*.—J. Ind. & Eng. Chem. 1918, v. 10, p. 288-290.

Astruc, A.: Notes on the physical and chemical properties of so acetylsalicylic acid esters used in pharmacy.—J. pharm. et chi 1918, v. 17, p. 386–388.

White, Robert C.: A report of experiences in the manufacture aspirin tablets.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 14 146.

Anderson, George A.: The quality of acetylsalicylic acid has been much superior to that obtained last year. This is probably due to manufacturers being able to perfect their process so that they are making a more uniform and better grade of this chemical.—Proc. N. W. D. A. 1918, p. 238.

Anon.: Aspirin tablets purporting to contain 5 grains of aspirin were found to contain only 3½ grains, the weight being made up with French chalk, starch, and a reducing sugar.—Chem. & Drug. 1918, v. 90, p. 831.

Table showing some of the analytical results reported for acetylsalicylic acid.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Anon	4	0	Bull. Vermont Bd. Health, 1918, v. 19, No. 1.
Anderson, George A	2	2	Proc. N. W. D. A. 1918, p. 229.
Ewe, G	1	1	Proc. Pennsylvania Pharm. Assoc. 1918, p. 101.
Harms, Herman	32	0	Rep. Utah D. & F. Com. 1918, p. 62.
Lea, E. J	4	1	Rep. California Bd. Health, 1918, p. 167.
Penniman, W. B. D	91	3	Rep. Maryland Bd. Health, 1915, p. 174.
Snapp, E. L	14	3	Proc. Kentucky Pharm. Assoc. 1918, p. 45.
Todd, A. R	23	6	Rep. Michigan D. & F. Com. 1918, p. 87.
van Buskirk, L. H	8	1	Ohio Public Health J. 1918, v. 9, p. 44, 84, and 181.

ACIDUM BENZOICUM.

Schutt, F. T., and Maloney, P. J.: A new method is proposed for commercially obtaining benzoic acid from the urine of Herbivoræ.—Canadian Chem. J. 1918, v. 2, p. 196, through Chem. Abstr. 1918, v. 12, p. 2548.

Lloyd, Stewart J.: Data showing the solubility of benzoic acid in ethyl acetate at 6.5°, 21.5°, and 75° C. are given.—J. Phys. Chem. 1918, v. 22, p. 300–303.

Svientoslavskii, V.: The heat of combustion of benzoic acid is given as 6,311 calories.—J. Am. Chem. Soc. 1917, v. 39, p. 2595–2600.

Lefeldt, M.: It is stated that 20 grams of toluol benzoic acid sublimed with 30 grams of Siam benzoin yields a benzoic acid which satisfies the potassium permanganate test prescribed by the Ph. Germ. It is therefore suggested that this test be revised in such manner that it will indicate the presence of synthetic acid.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 157–158.

Geiger, G. A.: A method is described for the use of a benzaldehyde sulphite compound as a standard in the quantitative separation and estimation of benzaldehyde and benzoic acid.—J. Am. Chem. Soc. 1918, v. 40, p. 1453–1456.

Wobisch, Franz: A description of a method for the quantitative determination of benzoic acid in fruit juices.—Arch. chem. Mikros. 1917, v. 10, p. 180–184.

Anderson, George A.: Several samples of benzoic acid examine were unsatisfactory because of their strong odor.—Proc. N. W. D. A 1918, p. 238.

Roberts, J. G.: Two samples of benzoic acid examined contained slight excess of chlorine.—Proc. Pennsylvania Pharm. Assoc. 191 p. 101.

ACIDUM BORICUM.

Mittelbach, William: Only boric acid in the crystalline for should be recognized in the U. S. P., as the powdered acid varies to much in purity and in its physical nature.—Proc. Missouri Phar Assoc. 1918, p. 80.

Anon.: Boric acid can be readily powdered if moistened with small quantity of alcohol or ether.—Pharm. Ztg. 1917, throug Pharm. Zentralh. 1918, v. 59, p. 128.

Iles, Lillian E.: A note on the substitution of mannitol fo glycerol in the assay of boric acid. The results obtained indicat that this substitution may be made without introducing an error i the assay.—Analyst, 1918, v. 43, p. 323.

Prescher, J.: Notes on the choice of an indicator for the acidimetric determination of boric acid. For solutions containing glycerol or manitol, phenolphthalein is recommended.—Ztschr. Unter Nahr.-u. Genussm. 1918, v. 36, p. 283–286.

Bagshaw, C. R.: Experiments are cited to prove that the determination of boric acid in powder or ointment by the ignition metho gives low results.—Analyst, 1918, v. 43, p. 138–139.

ACIDUM CITRICUM.

McDermott, F. A., and Walker, S. S.: The production of citri acid from waste orange juice through the action of Wehmer's *Citromyces* is stated to be possible.—Bull. Florida Agric. Exper. St 1917, No. 135, p. 129–144, through Exper. Sta. Rec. 1918, v. 37, 313–314.

Enz: If 10 drops of potassium acetate solution and 1 cubic centimeter of 90 per cent alcohol is added to 1 gram of citric acid dissolved in 2 grams of water, the solution should not become turbi demonstrating the absence of oxalic and tartaric acids.—Süd Apoth.-Ztg. 1918, p. 208, through Pharm. Zentralh. 1918, v. 59, 350.

Stollé, R.: The wording of the Ph. Germ. test requiring the melting of citric acid on a platinum foil is criticised.—Ber. deutsc pharm. Gesellsch. 1918, v. 28, p. 628.

Deutsche Pharmaceutische Gesellschaft: A test for the detectio of heavy metals in citric acid suitable for the Ph. Germ. is described.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 372.

Anderson, George A.: A large number of different lots of citric acid were assayed, all testing over 99.5 per cent, and being entirely satisfactory.—Proc. N. W. D. A. 1918, p. 238.

ACIDUM DIETHYLBARBITURICUM (NONOFFICIAL).

Tahara, Y., et al: Descriptions are given of methods for the manufacture of urea and diethylbarbituric acid.—J. Pharm. Soc. Japan, 1918, No. 434, p. 271.

Stollé, R.: The use of solid caustic potash instead of a solution is recommended in the test prescribed by the German pharmacopœia for diethylbarbituric acid. By this procedure, ammonia is liberated at once.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 628.

Deutsche Pharmaceutische Gesellschaft: The silver nitrate test for diethylbarbituric acid is commented on.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 372.

Tunmann, O.: The identification of veronal, extracted from acid aqueous solution by means of ether according to the Stas-Otto process is described.—Apoth.-Ztg. 1918, v. 32. p. 289–292.

Lea, E. J.: One sample of veronal examined was rejected.—Rep. California Bd. Health, 1918, p. 167.

ACIDUM FORMICUM, N. F.

Comanducci, E.: A note on the reaction of formic acid with the hydrosulphites. A blue color is developed on adding a dilute solution of nitroprussiate of sodium to a mixture of formic acid and a hydrosulphite.—Boll. chim.-farm. 1918, v. 57, p. 101–102.

Prud'Homme, Maurice: Thermochemical data are presented corroborating the viewpoint that formic acid may be considered as an aldehyde.—J. chim. phys. 1918, v. 16, p. 438–441.

Bickel, A.: Experiments are reported which show that formic acid in doses up to 0.07 gram daily is harmless for man.—Ztschr. physikal. Therap. 1917, v. 21, p. 257–263 through Zentralbl. Biochem. u. Biophys. 1918, v. 19, p. 792.

Anon.: A book notice calls attention to a volume by A. Dubosc entitled *L'acide formique ou methanoique*.—Chem. Abstr. 1918, v. 12, p. 484.

ACIDUM HYDROCHLORICUM.

Tenteleva Chemical Works: Danish patent No. 225546. Chemically pure hydrochloric acid is prepared by distilling the commercial acid with concentrated zinc chloride solution at 135° C.—Chem. Abstr. 1918, v. 12, p. 853.

Villiers, A.: The determination of ammonia and of hydrochloric acid by weighing as ammonium chloride is described.—Bull. soc. chim. France, 1918, v. 23, p. 306–308.

Kohn-Abrest, E.: A table is given comparing the amount of arsenic present in so-called pure hydrochloric acid and other common chemicals for the years 1916 and 1918. The Marsh apparatus and methods for determining arsenic are also described.—Rev. produits chim. 1918, v. 21, p. 199–202 and 214–216.

Noyes, A. A., and Ellis, J. H.: Data obtained in the determination of the free energy of dilution of hydrochloric acid in aqueous solution are presented.—J. Am. Chem. Soc. 1917, v. 39, p. 2532–2544.

Schorger, A. W.: In notes on the use of wood in chemical apparatus, it is stated that hydrochloric acid may be stored in containers of cypress, pine, fir, or redwood coated with asphalt or paraffin.—Met. Chem. Eng. 1918, v. 18, p. 528–531, through Chem. Abstr. 1918, v. 12, p. 1847.

Entat, M.: A description of an electrometric method for the determination of small quantities of hydrochloric acid in the presence of chlorides and other mineral or organic acids.—Ann. chim. analyt. 1918, v. 23, p. 5–7.

Éwe, G.: One lot of hydrochloric acid, C. P., examined contained an excess of iron and free chlorine.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 101.

ACIDUM HYDROCHLORICUM DILUTUM.

Bachman, Gustav: Four lots of diluted hydrochloric acid analyzed were found to contain 9.34, 10.54, 11.23, and 11.38 per cent of HCl, respectively.—Northwestern Drug. 1918, v. 19, No. 4, p. 52.

Snapp, E. L.: One sample of dilute hydrochloric acid examined was of U. S. P. quality.—Proc. Kentucky Pharm. Assoc. 1918, p. 44.

ACIDUM HYDROCYANICUM DILUTUM

Lewcock, W.: The decomposition of solutions of hydrocyanic acid with the formation of a yellow or brown coloration or deposit is attributed to the action of small quantities of basic substances which are principally derived from the glass containers, but which might also be introduced by the use of hard water in preparing the solutions.—Pharm. J. 1918, v. 101, p. 50–51.

Kolthoff, I. M.: The sensitiveness of the various tests for hydrocyanic acid is as follows, expressed in milligrams cyanogen per liter of solution: Prussian blue, 2; ferric thiocyanate, 0.1; picric acid, 1; guaiacum, 0.004; phenolphthalein, 0.05; silver, 0.03; iodine starch, 0.1.—Ztschr. anal. Chem. 1918, v. 57, p. 1–15, through J. Soc. Chem. Ind. 1918, v. 37, p. 225A.

Lavialle, P., and Varenne, L.: A description of a method for the identification and quantitative determination of small amounts of hydrocyanic acid. The method is based on the fact that the alkalies nd alkaline earth cyanides, except ammonium cyanide, are com- letely changed to sulphocyanates by the action of calcium polysul- hide and subsequently to ferric sulphocyanate by the action of the rric salt. The latter is determined by means of silver nitrate solu- on.—J. pharm. et chim. 1918, v. 17, p. 97–102.

Anderson, George A.: One shipment of hydrocyanic acid examined ntained only 1.52 per cent of HCN.—Proc. N. W. D. A. 1918, p. 29.

Engelhardt, H.: One shipment of hydrocyanic acid assaying only .75 per cent of absolute acid was rejected.—Proc. Maryland Pharm. ssoc. 1918, p. 80.

ACIDUM LACTICUM.

Saxe, S.: U. S. patent No. 1,249,511. Lactic acid is prepared by ydrolyzing vegetable ivory with sulphuric acid, adding calcium rbonate or zinc oxide, and inoculating the mixture with lactic fer- ent.—Chem. Abstr. 1918, v. 12, p. 370.

Thompson, F. C., and Suzuki, Kyohei: Experimental notes on the etermination of lactic anhydrides in lactic acid.—J. Am. Leather hem. Assoc. 1918, v. 13, p. 334–341, through Chem. Abstr. 1918, v. 2, p. 1710.

Lefeldt M.: To guard against the presence of tartaric, citric, and xalic acids, the Ph. Germ. requires that an aqueous solution of lactic cid (1:9) should not undergo a change in color by heating with n excess of lime water.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, . 159.

Harvey, A.: A colorimetric method for the determination of iron n lactic acid makes use of $K_4Fe_2(CN)_6$. The color is compared ith a standard solution containing 0.7 gram of oxidized ferrous mmonium sulphate in 1,000 cubic centimeters.—J. Soc. Leather rades Chem. 1918, v. 2, p. 37–38, through Chem. Abstr. 1918, v. 12, . 1427.

Szeberényi, P.: A method for the estimation of lactic acid in the resence of other organic acids depends on the fact that the former, hen heated with chromium trioxide and sulphuric acid, yields acetic cid, carbon dioxide, and water. If the oxidized mixture is distilled, he quantity of acetic acid in the distillate is a measure of the lactic cid present. The other organic acids are oxidized directly to CO_2.— tschr. anal. Chem. 1917, v. 56, p. 505–506, through J. Chem. Soc. ond, 1918, v. 114, part 2, p. 138.

Anderson, George A.: Supplies of U. S. P. lactic acid became very carce, and it was necessary to rely on the commercial grade for some urposes. It was found advisable to purify, decolorize, and deodor- ze this product before using.—Proc. N. W. D. A. 1918, p. 238.

MacDonald, Effie L.: A study of the inhibiting action of lactic aci on the growth of certain bacteria and fungi.—J. Infect. Dis. 1917, v 21, p. 322–325.

ACIDUM NITRICUM.

Klein, Frederic: An article discussing nitric acid and its variou uses in pharmacy, medicine, and the industries.—Practical Druggist 1918, v. 36, No. 7, p. 25–26; D.-A. Apoth.-Ztg. 1918, v. 39, p. 45–46.

Stollé, R.: The test for the presence of iodic acid in nitric acid prescribed by the Ph. Germ. can be eliminated.—Ber. deutsch. pharm Gesellsch. 1918, v. 28, p. 628.

Kohn-Abrest, E.: A table is given comparing the amount of arseni present in so-called pure nitric acid and other common chemical for the years 1916 and 1917. The Marsh apparatus and method for determining arsenic are also described.—Rev. prod. chim. 1918 v. 21, p. 199–202 and 214–216.

Iwanoff, W. N.: Canadian patent No. 181,048. Nitric acid is purified by introducing it into a solution of zinc or nickel, or other suitable nitrate and heating to about 170° C.—Chem. Abstr. 1918, v. 12 p. 747.

Luce, E.: An improved method for the determination of nitri acid in bismuth subnitrate is based upon reduction with oxalic aci in the presence of sulphuric acid.—Bull. soc. chim. France, 1918, v 23, p. 264–271; J. pharm. et chim. 1918, v. 17, p. 349–359.

Leuchs, K.: An illustrated description of an apparatus for the determination of nitric acid by the Schulze-Tiemann method.—Chem Ztg. 1918, v. 42, p. 235, through J. Soc. Chem. Ind. 1918, v. 37, p 368A.

Anon.: A book notice calls attention to a volume by J. Escar entitled *La fabrication electrochimique de l'acide nitrique et de composés nitrés a l'aide des éléments de l'air.*—Chem. Abstr. 1918 v. 12, p. 453.

For references on the manufacture of nitric acid, see Chem. Abstr 1918, v. 12; J. Soc. Chem. Ind. 1918, v. 37; J. Chem. Soc. Lond. 1918 v. 113 and 114.

Brighton, R.: A study of the action of nitric acid on castor oil.—J. Soc. Chem. Ind. 1917, v. 36, p. 984–986.

Montieth, J. D.: Experiments conducted by the Department of Health of New York City indicate that nitric acid is superior in value to tincture of iodine for the cauterization of wounds infected with rabies.—Apothecary, 1918, v. No. 2, p. 36.

ACIDUM NITROHYDROCHLORICUM DILUTUM.

Todd, A. R.: One sample of dilute nitrohydrochloric acid examined was not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

ACIDUM OLEICUM.

Schmidt, A.: British patent No. 109,386 describes the production f oleic acid by subjecting paraffin at 100–120° C. to a blast of air or xygen.—Chem. Abstr. 1918, v. 12, p. 94.

Csonka, Frank A.: A study of the nephelometric values of choles- erol and the higher fatty acids, stearic, palmitic, and oleic.—J. Biol. hem. 1918, v. 34, p. 577–582.

Engelhardt, H.: A number of shipments of oleic acid examined ad a high congealing point, showing the presence of an undue mount of solid fatty acids, and some contained unsaponified fats.—Proc. Maryland Pharm. Assoc. 1918, p. 81.

Anderson, George A.: One shipment of oleic acid examined con- ained an excess of solid fatty acids.—Proc. N. W. D. A. 1918, p. 229.

ACIDUM PHENYLCINCHONINICUM.

Neumann Chem. Fabrik Co. and Zeitner, J.: Swedish patent No. 4,038 describes the preparation of phenylcinchoninic acid by the con- ensation of isatin and acetophenone in methyl alcohol with sodium ydroxide.—Chem. Abstr. 1918, v. 12, p. 2573.

Rotter, Luise: An investigation of the physiologic action of tophan and some of its derivatives. The increased output of uric cid is attributed to hydroxyphenylquinolinecarboxylic acid, which s formed in the system when atophan is taken by mouth.—Ztschr. xper. Path. u. Therap. 1917, v. 19, p. 176–197, through J. Chem. Soc. ond. 1918, v. 114, part 1, p. 362.

Wilcox, Reynolds W.: A résumé of the results of laboratory in- estigation and clinical observations on the value of phenylcin- honinic acid as a remedy.—Med. Rec. 1918, v. 94, p. 625–626.

ACIDUM PHOSPHORICUM.

Schmitz, F. C.: U. S. patent No. 1,242,987 describes the preparation f phosphoric acid by heating a mixture of phosphate rock, sand, nd carbon.—Chem. Abstr. 1918, v. 12, p. 204.

Heckenbleikner: U. S. patent No. 1,264,510. Phosphoric acid is repared by combining with water the P_2O_5 precipitated electrically rom furnace gases.—Chem. Abstr. 1918, v. 12, p. 1619.

Balareff, D.: A study of the thermal dissociation of phosphoric cid by heating for varying lengths of time in a pear-shaped gold lask having a long neck.—Ztschr. anorg. Chem. 1917, v. 102, p. 34–40, hrough J. Chem. Soc. Lond. 1918, v. 113, p. 75–76.

Macri, V.: In a discussion of the reactions of hydrogen peroxide, t is stated that this compound prevents the precipitation of ammo- ium phosphomolybdate.—Boll. chim. farm. 1917, v. 56, p. 417–418.

Clarens, J.: A method for the quantitative estimation of phosphoric acid consists of precipitating the acid as ammonium phosphomolybdate and then estimating the nitrogen present in the precipitate by a gasometric method.—Compt. rend. acad. sc. 1918, v. 166, p. 259.

Balareff, D.: An investigation of the method of determining phosphoric acid as magnesium pyrophosphate.—Ztschr. anorg. Chem. 1917, v. 101, p. 229–234, through J. Soc. Chem. Ind. 1918, v. 37, p. 109A.

Walters, J. C.: A description of a method of determining P_2O_5, in which the acid is precipitated and weighed as phosphomolybdic anhydride.—Chem.-Analyst, 1918, No. 26, p. 15–17.

Grossfeld, J.: A modification of the citrate method for the estimation of phosphoric acid is described.—Ztschr. anal. Chem. 1918, v. 57, p. 28–33, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 129.

ACIDUM SALICYLICUM.

Frylander, J. H.: A review of the principal methods of synthesizing salicylic acid and of the methods employed commercially. The commercial preparation of salicylic acid derivatives is also discussed.—Rev. prod. chim. 1918, v. 21, p. 34–35.

Theodor, M.: British patent No. 115,080 describes the purification of salicylic acid by volatilizing it, mixing the vapors with dry air, nitrogen, or carbon dioxide, and cooling the mixture to such a temperature that the salicylic acid is condensed while the phenol and other impurities remain as vapors.—Chem. Abstr. 1918, v. 12, p. 1785.

Tunmann, O.: Methods for the identification of veronal, acetanilid, salicylic acid, and phenacetin are described.—Apoth.-Ztg. 1917, v. 32, No. 45–46, through Pharm. Zentralh. 1917, v. 58, p. 481–484.

Anderson, George A.: All of the lots of salicylic acid examined showed the proper melting point and answered to the U. S. P. tests.—Proc. N. W. D. A. 1918, p. 238.

Éwe, G.: Of 4 lots of salicylic acid examined, only one was entirely satisfactory.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 101.

Shelby, Edmund P.: A case of poisoning by 5 grains of acetylsalicylic acid is reported.—J. Am. M. Assoc. 1918, v. 71, p. 1381.

Anon.: An excellent oil solution of salicylic acid for external use is made by slightly heating 15 grams of the acid with 100 grams of castor oil.—Pharm. Zentralh. 1918, v. 39, p. 11.

ACIDUM STEARICUM.

Boeck, P. A.: A mixture of equal amounts of infusorial earth and fullers' earth is stated to be a suitable medium for decolorizing stearic acid, oils, and other similar substances.—Chem. Abstr. 1918, v. 12 p. 1916.

Csonka, Frank A.: A study of the nephelometic values of cholesrol and the higher fatty acids, stearic, palmitic, and oleic.—J. Biol. hem. 1918, v. 34, p. 577–582.

ACIDUM SULPHURICUM.

Skinner, L. B.: The sulphuric-acid situation in the United States. hanges in the manufacture of sulphuric acid brought about by the ar are discussed.—Met. Chem. Eng. 1918, v. 18, p. 82–85.

Cory, H. E. J.: Descriptions are given of apparatus and methods r the dearsenication of sulphuric acid.—Chem. Trade J. 1918, v. 62, . 89–90.

Palet, L. P. J.: A new test for the detection of selenium in sulhuric acid consists in adding a small crystal of aspidospermine to drop or two of the acid to be tested and heating over a Bunsen ame until fumes of H_2SO_4 are given off. The appearance of a deep iolet color indicates the presence of selenium.—Anal. chim. analyt. 918, v. 23, p. 25–26.

Enz, K.: It is recommended that the diphenylamine test for the resence of nitric acid in sulphuric acid be included in the new ediion of the German pharmacopœia.—Sudd. Apoth.-Ztg. 1918, p. 208 hrough Pharm. Zentralh. 1918, v. 59, p. 351.

Kohn-Abrest, E.: A table is given comparing the amount of arsenic resent in so-called pure sulphuric acid and other chemicals for the ears 1916 and 1917. The Marsh apparatus and methods for deterining arsenic are also prescribed.—Rev. prod. chim. 1918, v. 21, p. 99–202 and 214–216.

Karaoglanow, Z.: A report of studies in the determination of sulhuric acid and barium as barium sulphate.—Ztschr. anal. Chem. 917, v. 56, p. 417–439 and 487–498, through J. Soc. Chem. Ind. 1918, . 37, p. 108–109A and 168A. See also Ztschr. anal. chem. 1918, v. 57, . 77–98.

Wiard, W. H.: The effect of arsenic in sulphuric acid on the rate f solution of iron. The rate of solution is reduced approximately ive times by an acid containing 0.003 per cent of arsenic.—Chem.-Analyst, 1918, No. 25, p. 10–11.

ACIDUM SULPHURICUM DILUTUM.

Bachman, Gustav: One of two samples of diluted sulphuric acid xamined contained 15.7 per cent of H_2SO_4.—Northwestern Drug. 918, v. 19, No. 4, p. 52; Proc. Minnesota Pharm. Assoc. 1918, p. 119.

ACIDUM TANNICUM.

Benson, H. K., and Jones, F. M.: An experimental study to deternine the tannin content of some Pacific coast woods.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1096–1098.

Schell, E.: A critical study of commercial methods for the dete mination of tannin.—J. Soc. Leather Trades Chem. 1917, v. 1, p. 10 105, through Chem. Abstr. 1918, v. 12, p. 320.

Lauffmann, R.: Notes on the detection of tannin by the formald hyde precipitation method.—J. Soc. Leather Trades Chem. 1918, v. p. 59–60.

Bennett, Hugh G.: A discussion of improvements in the hid powder method for estimating tannin.—J. Soc. Leather Trad Chem. 1917, v. 1, p. 8–22, through Chem. Abstr. 1918, v. 12, p. 319.

ACIDUM TARTARICUM.

Enz, K.: The presence of iron in tartaric acid becomes evident the formation of a dark color on adding ammonium hydroxide subs quent to applying the hydrogen sulphide test.—Südd. Apoth.-Zt 1918, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 351.

Kohn-Abrest, E.: A table is given comparing the amount arsenic present in tartaric acid and other common chemicals durin the years 1917 and 1914.—Rev. prod. chim. 1918, v. 21, p. 199–2 and 214–216.

Willaman, J. J.: An optical method for the determination of mal and tartaric acids in the presence of one another. The method based on the increase in the rotation of malic and tartaric acids pr duced by certain activators.—J. Am. Chem. Soc. 1918, v. 40, p. 69 704.

Doubet: Notes on some incompatibilities of tartaric acid.—Farn Españ. 1918, v. 50, p. 166–168.

Anderson, George A.: All samples of tartaric acid examined we of satisfactory quality.—Proc. N. W. D. A. 1918, p. 238.

Anon: A sample of tartaric acid examined proved to be of U. S. quality.—Bull. Vermont Bd. Health, 1918, v. 18, No. 3.

ACIDUM TRICHLORACETICUM.

Anon: It is suggested that the new edition of the Ph. Gern direct that trichloracetic acid be preserved in well-stoppered contai ers.—Pharm. Zentralh. 1918, v. 59, p. 207.

Gallaher, T. J.: Trichloracetic acid is stated to be a specific f Vincent's angina. The concentrated acid is applied directly to th infected parts.—Laryngoscope, St. Louis, 1918, v. 28, p. 551, throug J. Am. M. Assoc. 1918, v. 71, p. 600–601.

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Tunmann: Methods for the microchemical identification of aconi tine are described.—Apoth.-Ztg. 1915, v. 29, p. 678–679 and 686–68 through Pharm. Zentralh. 1918, v. 59, p. 119.

Palet, Luciano P. J.: An investigation of the resistance of aconi-ine to putrefaction, with special reference to its detection in the iscera in cases of poisoning.—Ann. soc. quim. Argentina, 1918, v. , p. 480–487.

Anderson, George A. It is impossible to obtain aconitine, as it is ractically out of the market.—Proc. N. W. D. A. 1918, p. 238.

ACONITUM.

Dohme, A. R. L.: Results obtained by the committee on aconite ssay show that the U. S. P. IX method gives unjustifiably high esults and that the U. S. P. VIII method is more nearly correct. lethyl red was found to be a more reliable indicator for aconite han cochineal. Furthermore, it was found that there is no relation-hip between the results obtained in the chemical assay of aconite nd its physiological activity.—Proc. Am. Drug Mfg. Assoc. 1918, . 202.

Busquet, H.: In the biologic test for aconite, the author considers ntraperitoneal injection of the drug to be preferable to subcutaneous njection because of the fact that the danger of losing some of the iquid on withdrawal of the syringe is avoided.—Bull. sc. pharmacol. 918, v. 25, part 1, p. 87–88.

Engelhardt, H.: Two samples of aconite root examined were of ood quality.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

Sharp, E. G.: Notes on aconite, its preparation, dosage and nethods of administering the drug in different diseases.—Nat. Eclect. I. Assoc. Quart. 1918, v. 10, p. 310–315.

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Steuart, Alan W.: A discussion of the Valenta and Crismer tests or the detection of foreign fats in lard, butter, etc.—J. State Med. 918, v. 26, p. 312–315.

Soucheyre: Based on an experience of 25 years, it is found that ard and similar fats used in the preparation of pomades may be kept for years if desiccated and stored in small well-corked bottles in-tead of the pots ordinarily used.—Répert. pharm. 1918, v. 29, p. 44.

Anon.: Alternative formulas are given for preparations contain-ng lard officially modified in or withdrawn from the Ph. Brit. 1914.—Pharm. J. 1918, v. 101, p. 108–109.

Penniman, W. B. D.: Of 6 samples of lard examined, 3 were re-jected for not conforming with the U. S. P. requirements.—Rep. Maryland Bd. Health, 1915, p. 174.

ADEPS LANÆ.

Braun, H.: A short note on the history of lanolin and the orig of its manufacture in Germany.—Melsunger Med-Pharm. Mitt 1916, No. 1, through Pharm. Zentralh. 1917, v. 58, p. 70.

Röhmann, F.: A contribution to our knowledge of the compone of wool fat.—Chem. Umschau, 1917, p. 48, through Pharm. Zentra 1917, v. 58, p. 416–417.

Lifschutz, I.: U. S. Patent No. 1,252,590 describes the preparati of a waxlike substance from lanolin by saponification with an al holic alkali solution.—Chem. Abstr. 1918, v. 12, p. 773.

Mansbridge, W.: The properties and testing methods of wool and various oil pitches are described.—J. Soc. Chem. Ind. 1918, v. p. 182–185T.

Bouvet, M.: A review of the possible uses of lanolin in pharm ceutical preparations, cosmetics, and in the industries.—Bull. pharmacol. 1918, v. 25, p. 233–246.

Anon.: A Swedish substitute for lanolin consists of a mixture oxycholesterin and paraffin.—Allm. svenska läkärtidin. 1916, p. through Schweiz. Apoth.-Ztg. 1918, v. 56, p. 147.

Roberts, J. G.: One lot of anhydrous wool fat examined was U. S. P. quality except that it had a low iodine value and contain slightly excessive amounts of ash and free acid. Another lot w slightly below the U. S. P. standard in its iodine value.—Proc. Pen sylvania Pharm. Assoc. 1918, p. 101.

Éwe, G.: Occasional lots of wool fat examined had an offensi odor.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 101.

ADEPS LANÆ HYDROSUS.

Robert, J. G.: Of two lots of hydrous wool fat examined, one w of very poor quality.—Proc. Pennsylvania Pharm. Assoc. 1918, 101.

ADONIS.

Heyl, Frederick, et al.: A report of an examination of the leav of *Adonis vernalis*. The authors failed to obtain any more than t slightest evidence of adonidin, or any glucoside in the leaf, but fou that more than 60 per cent of the toxicity was due to the basic fra tion precipitated by phosphotungstic acid.—J. Am. Chem. Soc. 191 v. 40, p. 436–453.

ÆTHER.

The Roessler and Hasslacher Chemical Company; U. S. patent N 1,245,742. A process for the preparation of paraffin ethers consis of passing a vaporized mixture of a chlorine derivative of a hydr carbon with an inert gas over a basic oxide, such as lime, at a temparature of 250°–450° C.—J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 98.

Michaelis, G.: Canadian patent No. 173,128. Commercial ether is purified by heating to the boiling point with caustic alkali. The ether is condensed and repeatedly returned to the alkali until no trace of impurities remain.—Chem. Abstr. 1918, v. 12, p. 155.

Mallinckrodt and Alt: A description of a method for determining small quantities of alcohol and water in ether. The method depends on the fact that alcohol and water are taken up by dry calcium carbonate.—Apoth.-Ztg. 1917, v. 32, p. 595, through Pharm, Zentralh. 1918, v. 59, p. 62.

Maue, G.: A test for the presence of aldehydes in ether. One cubic centimeter of the sample is mixed with 0.02 gram of guaiacol carbonate, 1 cubic centimeter of water, and 1 drop of ferric chloride solution, and 2 cubic centimeters of sulphuric acid are carefully added. Pure ether for anaesthetic use should not yield a red-colored zone. The sensitiveness of the test is 1 in 300,000.—Pharm. Ztg. 1918, v. 63, p. 255–256, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 336.

Richter, E.: In testing ether for peroxide, Dietze's reaction is recommended. Cork stoppers coated with collodion are most suitable for closing flasks filled with ether intended for anaesthesia.—Apoth.-Ztg. 1918, v. 33, p. 191–192, through Chem. Zentralbl. 1918, v. 2, p. 139–140. See also Pharm. Zentralh. 1918, v. 59, p. 207.

Wobbe, W.: A number of tests for determining the value of ether intended for anaesthetic purposes are described. An abstract.—Boll. chim.-farm. 1918, v. 57, p. 385.

McDavid, James W.: The ignition temperature of ether vapor mixed with air is given as 1033° C.—J. Chem. Soc. 1917, v. 111, p. 1003–1015.

Linde, Ebbe: An experimental study of the influence of electrolytes on the solubility of ether in water.—Arkiv. Kem., Min. og Geol. 1917, v. 6, No. 20, p. 1–17.

Lathrop, Walter: The use of ether in oil as an anaesthetic in several hundred goiter operations has shown that it is most valuable in head and neck operations.—New York M. J. 1918, v. 107, p. 679–681.

Descombs and Richards: Ether is stated to be an efficient substance for maintaining asepsis in wounds.—Paris méd. 1918, v. 8, p. 229.

Saliba, John: The value of ether in surgical infections and its effect on immunity is discussed.—New York M. J. 1918, v. 107, p. 159–160.

ÆTHER ACETICUS, N. F.

Stollé, R.: The title "Acetic ester" should be substituted for the term "Acetic ether" which was commonly used in the past.—Ber. deutsch. pharm. Gessellsch. 1918, v. 28, p. 628.

Wegscheider, Rud. and Ripper, Lilly: Experimental data relativ to the saponification of ethyl acetate by the use of alcoholic sodium hydroxide are presented.—Monatsh. Chem. 1918, v. 39, p. 325–373.

Gradenwitz, H.: A description of a graphic method for the analysis of mixtures of ethyl acetate, alcohol, and water. Chem. Ztg. 1918 v. 42, p. 221, through J. Soc. Chem. Ind. 1918, v. 37, p. 392A.

Roberts, J. G.: One lot of acetic ether examined yielded a trifle mor residue than is permitted by the U. S. P.—Proc. Pennsylvania Pharm Assoc. 1918, p. 100.

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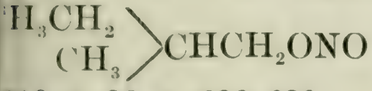

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Glass, W. S.: Aromatic waters prepared by solution of the oil in arm water are claimed to possess a finer and stronger odor than hose prepared by distillation.—Chem. & Drug. 1918, v. 90, p. 194.

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Utech, P. H.: To insure the best results in the keeping qualities f the aromatic waters, it is important that the pharmacopœial reuirement of using distilled water which has been recently boiled nd cooled be adhered to.—Apothecary, 1918, v. 30, No. 8, p. 24.

AQUA AMMONIÆ.

Kohn-Abrest, E.: A table is given comparing the amount of rsenic present in so-called pure ammonia water for the years 1916 nd 1917. The Marsh apparatus and methods for determining rsenic are also described.—Rev. prod. chim. 1918, v. 21, p. 199–202 nd 214–216.

Enz, K.: The detection of pyridine bases in ammonia water by aturation with nitric acid, specific gravity 1.3, is recommended as suitable test for introduction into the new edition of the Ph. erm.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. entralh. 1918, v. 59, p. 352.

Table showing some of the analytical results reported for ammonia water.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
achman, Gustav	3	3	Northwestern Drug., 1918, v. 19, No. 4, p. 52.
an Buskirk, L. H	1	1	Ohio Public Health J., 1918, v. 9, p. 84.
ongeward, M	30	22	Bull. North Dakota Agric. Exper. Sta., 1918, v. 5, p. 28–29.
rary, Guy G	1	1	Rep. South Dakota F. & D. Com., 1918, p. 64.

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Leuken: A note on the use of peach and apricot kernels in the reparation of bitter-almond water.—Apoth.-Ztg. 1918, v. 33, p. 190–191.

Feist, K.: An artificial bitter-almond water satisfying the requirements of the Ph. Germ. may be made from $C_6H_5CH(OH)CN$, grams; alcohol, 192 grams; and water, 803 grams.—Pharm. Ztg. 191 v. 63, p. 255, through Chem. Zentralbl. 1918, v. 2, p. 215.

Leuken: A note calls attention to the fact that commercial specimens of bitter-almond water marketed in Germany contain as a rul more than 0.02 per cent of hydrocyanic acid, which is the limi specified in the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 27, throug Chem. Zentralbl. 1918, v. 89, part 1, p. 368–369.

AQUA AURANTII FLORUM.

Utech, P. H.: If orange flower water is subjected to a freezin temperature, as frequently happens in the winter, its odor is impaired.—Apothecary, 1918, v. 30, No. 8, p. 24.

AQUA CAMPHORÆ.

Anon.: Aqua Camphorata—Merck is a 0.14 per cent solution o camphor in Ringer's solution.—Pharm. Weekblad, 1918, v. 55, p. 1405.

AQUA DESTILLATA.

Moseley, Hal W., and Myers, Rollin G.: A description of a still for the continuous preparation in quantity of water of a high degree of purity. Illustrated.—J. Am. Chem. Soc. 1918, v. 40, p. 1409–1411.

Carles, P.: Notes on substitutes for distilled water used in pharmacy and in the industries. A discussion of the purity of water from different sources.—Répert. pharm. 1918, v. 29, p. 313–315.

AQUA HAMAMELIDIS.

Child, E. A.: The virtues of witch-hazel extract are said to have been made known to the white race by the Indian. The process of making the extract to-day is described.—Pract. Drug. 1918, v. 36, No. 8, p. 32.

Table showing some of the analytical results reported for witch hazel.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Lea, E. J.	1	0	Rep. California Bd. Health, 1918, p. 167.
Snapp, E. L.	4	1	Proc. Kentucky Pharm. Assoc. 1918, p. 44.
Penniman, W. B. D.	8	0	Rep. Maryland Bd. Health, 1915, p. 174.
McLaughlin, Allan J.	9	1	Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.
Todd, A. R.	8	0	Rep. Michigan D. & F. Com. 1918, p. 87.
Anon.	3	0	Bull. Vermont Bd. Health, 1918, No. 3 and 4; v. 19, No. 1.

AQUA ROSÆ.

Utech, P. H.: If rose water is exposed to a freezing temperature, as is frequently the case in the winter, its odor is impaired.—Apothecary, 1918, v. 30, No. 8, p. 24.

ARGENTI NITRAS.

Schneider, L.: A description of a procedure for titrating silver nitrate with potassium iodide using palladious nitrate as the indicator.—J. Am. Chem. Soc. 1918, v. 40, p. 583–593.

Kunz-Krauze, Herman: An investigation of the cause for the explosion which results when silver nitrate is triturated with iodoform, or one of the other trichlorhalides of methane.—Arch. Pharm. 1918, v. 256, p. 252–263, through Chem. Zentralbl. 1918, v. 89, part 2, p. 1071.

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Nukada, Y.: U. S. patent No. 1,272,987. A silver protein compound is prepared by heating silver nitrate at 50° C. with alkali and a liquid prepared by heating 30 pounds of natto with 12 gallons of water for 6 hours at 100° C.—Chem. Abstr. 1918, v. 12, p. 1909.

Lefeldt, M.: The German pharmacopœia requires that silver proteinate shall contain at least 8 per cent of silver. The quantitative method of the pharmacopœia for determining silver is stated to give low results. An improved method is described.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 160–161.

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Rupp, E.: Tests for determining the purity of silver citrate and silver lactate are described.—Arch. Pharm. 1918, v. 256, p. 192–206, through Chem. Zentralbl. 1918, v. 89, part 2, p. 677.

Anon.: The manufacturers of argyrol advise that argyrol solutions be freshly prepared when required for use as the bacteriacidal power diminishes on standing.—J. Am. M. Assoc. 1918, v. 71, p. 1084.

Auld, A. G.: The "pyrogenic" effect of commercial colloidal silver preparations obtained on injecting the material is attributed to the protective substances used in making the preparation.—Brit. M. J. 1918, v. 1, p. 195–197.

Culver, H.: An investigation of the gonococcidal action of protein silver solution *in vitro*, with special reference to the silver fastness of gonococci.—J. Lab. & Clin. Med. 1918, v. 3, p. 487–493.

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Forster, M. O.: A book review of a monograph by Gilbert T. Morgan entitled *Organic Compounds of Arsenic and Antimony.*—Analyst, 1918, v. 43, p. 282–283.

Anon.: Salvarsan preparation No. 1495 is a stable solution of an unoxidizable arsenobenzene sulphoxalate combination.—Deutsch. med. Wchnschr. 1918, p. 1180.

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Soref, E.: A comparison of the toxicity of colloidal arsenic with other arsenic compounds administered intravenously. From experiments on rabbits, it is concluded that 3 grams of colloidal arsenic can be administered to a man weighing 60 kilos without danger.—Compt. rend. soc. biol. 1918, v. 81, p. 57–58.

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BELLADONNÆ FOLIA.

Schneider, Albert: Notes on the cultivation of belladonna in California.—Pacific Pharm. 1918, v. 11, p. 215–220, 242–246, 267–270.

Sievers, A. F.: The U. S. P. statement concerning the limit of stems or other foreign matter in belladonna leaves is criticized on the ground that it makes it impossible to furnish the drug at a moderate cost. Data are given to show that the limit for stems should be increased to 20 per cent.—Am. J. Pharm. 1918, v. 90, p. 838.

Éwe, George E.: A table showing the variation in the alkaloidal content of leaves from 374 individual belladonna plants grown at Glenolden, Pa., is given. The alkaloidal content varied from 0.007 to 1.1 per cent.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 166.

Tunmann, O.: A note calls attention to the adulteration of belladonna leaves with the leaves of phytolaca, ailanthus glandulosa, and sunflower.—Apoth.-Ztg. 1917, v. 32, p. 181, through Pharm. Zentralh. 1918, v. 59, p. 269.

Eder, R.: False belladonna leaves from Italy were found to be derived from *Phytolaca decandra*, L. and to be devoid of any alkaloid.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 49–52.

Anon.: A discussion of the suggestion that *Solandra longiflora* a suitable substitute for belladonna.—Chem. & Drug. 1918, v. 90, p418.

Tunmann, O.: A test for the identification of atropine in powdered ladonna leaves is recommended for introduction into the Ph. Germ. e test is described in detail.—Apoth.-Ztg. 1918, v. 33, p. 311.

Rasmussen, H. B.: A report on researches dealing with an exact-antitative method for the determination of atropine.—Ber. deutsch. arm. Gesellsch. 1917, v. 27, p. 193–201.

Hankey, Wm. T.: The alkaloidal content of 4 samples of pow-red belladonna leaves examined varied from 0.319 to 0.490. One nple of whole belladonna leaves examined contained about 90 per nt of hyoscyamus leaves, while another consisted almost entirely of ke leaves.—Proc. Ohio Pharm. Assoc. 1918, p. 133.

Green, C.: One lot of wild belladonna plant examined contained ly traces of alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1918, 101.

Engelhardt, H.: Of 23 shipments of belladonna leaves examined, were rejected as they were below U. S. P. strength.—Proc. Mary-nd Pharm. Assoc. 1918, p. 82.

Anderson, George A.: Two lots of belladonna leaves of domestic igin examined were of excellent quality and yielded 0.52 per cent d 0.53 per cent, respectively, of alkaloids. One of 10 shipments belladonna leaves did not answer the U. S. P. requirements for kaloids, as it assayed only 0.25 per cent.—Proc. N. W. D. A. 1918, 230.

Roberts, J. G.: All the samples of belladonna leaves examined re of U. S. P. quality.—Proc. Pennsylvania Pharm. Assoc. 1918, 101.

BELLADONNÆ RADIX.

Holmes, E. M.: The sources of Indian belladonna root appearing the London market within recent years are stated to be *Atropa lladonna*, cultivated in the Kumaun Government Gardens from ropean seed, and *A. lutescens* Jacquemont, which is the root of the ld Himalayan plant.—Pharm. J. 1918, v. 101, p. 103.

Ewe, G.: One lot of belladonna root examined did not conform to e U. S. P. requirement, as it contained 11.64 per cent of scopola root. t more than 10 per cent of belladonna stem bases or other foreign atter is allowed.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 101.

Engelhardt, H.: Two shipments of belladonna root examined were good quality.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

BENZALDEHYDUM.

Putnam, M. E.: U. S. patent No. 1,272,522 describes the prep-ation of benzaldehyde by heating together $C_6H_5CH_2Br$ and $NaNO_3$ the boiling point.—Chem. Abstr. 1918, v. 12, p. 1885.

Deutsche Pharmaceutische Gesellschaft: The Ph. Germ. IV spe fications for the specific gravity of benzaldehyde are stated to wrong. They should read "1.0055 to 1.050." The test for the dete tion of chlorinated products is also criticized.—Ber. deutsch. phar Gesellsch. 1918, v. 28, p. 373–374.

Stollé, R.: The Ph. Germ. test for the presence of nitrobenzol a aniline in benzaldehyde are discussed and improvements are su gested.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 629.

Geiger, G. A.: A method is described for the use of benzaldehy sulphite compound as a standard in the quantitative separation a estimation of benzaldehyde and benzoic acid.—J. Am. Chem. S 1918, v. 40, p. 1453–1456.

BENZENE (NONOFFICIAL).

Anon.: Benzene is the chemical name of the hydrocarbon C_6H The term "benzol" is preferred in trade because of the likelihood confusing the former with benzine, a mixture of aliphatic hydroca bons. An abstract.—Pharm. Era, 1918, v. 51, p. 280.

Lagerlöf, Daniel: The constitution of benzene and of some co densed aromatic hydrocarbons considered from a thermochemic standpoint.—J. prakt. Chem. 1917, v. 96, p. 35–49, through J. Che Soc. Lond. 1918, v. 114, part 2, p. 31–32.

Adam, W. G.: A method for the analysis of crude benzenes described.—Gas World, 1918, v. 68, p. 20–21.

Formánek, J., et al.: Pure benzene freezes at +5.5° C.—Chem. Zt 1917, v. 41, p. 713–714 and 730–731, through J. Chem. Soc. Lon 1917, v. 112, part 2, p. 581–582.

McDavid, James W.: The ignition temperature of benzene mixe with air is given as 1,062° C.—J. Chem. Soc. Lond. 1917, v. 111, 1003–1015.

Bohme, A., and Koster, W.: A clinical study of benzene poisonin The main effect is hemolysis. No injury to the lungs and kidne was observed.—Arch. exper. Path. u. Pharmakol. 1917, v. 81, p. 1- through Physiol. Abstr. 1917, v. 2, p. 528.

BENZINUM PURIFICATUM.

Korpiuski, A.: A refractometric method has been worked out f determining the percentage of aromatic hydrocarbons in benzine.- Petroleum Rev. 1917, v. 37, p. 108, 205–206, through Chem. Abst 1918, v. 12, p. 92.

Anon.: Experiments conducted by the National Fire Protecti Association of the United States show that the addition of 30 to per cent of carbon tetrachloride is necessary to render benzine no inflammable.—Chem. & Drug. 1918, v. 90, p. 733.

Hall, Maurice C., and Foster, Winthrop D.: Experiments on animals with various anthelmintics, including benzine, are reported.—J. Agric. Res. 1918, v. 12, p. 397–447.

BENZOINUM.

Farwell, O. A.: The source of Siam benzoin is given as some other species of Styrax in the U. S. P. IX. As *Styrax tonkinense* Craib and *Styrax siamenese*, Rordorf are species which have been reported from the heart of the Siam benzoin district, these names should be adopted.—Drug. Circ. 1918, v. 62, p. 535.

Zinke, Alois, and Lieb, Hans: A chemical study of the constituents of resins. I. A study of siaresinol from Siam benzoin. It is concluded that siaresinol is probably identical with the benzoresinol obtained by Ludy.—Monatsh. Chem. 1918, v. 39, p. 95–102, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 398–399.

Lieb, Hans, and Zinke, Alois: A contribution of our knowledge of the constituents of resins. II. A study of the constituents of Sumatra benzoin.—Monatsh. Chem. 1918, v. 39, p. 219–230, 627–639, through Chem. Zentralbl. 1918, v. 89, part 2, p. 633.

Reinitzer, Friedric: Lubanol benzoate, a colorless crystalline compound, was isolated from Siam benzoin.—Arch. Pharm. 1914, v. 252, p. 341, through Pharm. Zentralh. 1918, v. 59, p. 76.

Todd, A. R.: Three samples of gum benzoin examined proved to be of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

Suto, N.: One lot of gum benzoin examined contained only 59.5 per cent alcohol-soluble matter, whereas the U. S. P. requires 75 per cent.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

Anderson, George A.: Four lots of gum benzoin examined tested below the U. S. P. requirement of 75 per cent soluble in alcohol. They assayed as follows: 72 per cent, 67.5 per cent, 60 per cent, and 59 per cent. Some of the samples contained considerable woody material.—Proc. N. W. D. A. 1918, p. 239.

BENZOSULPHINIDUM.

Merl, T., and Lüft, K.: An application of the Mondel and Neuberg method to the determination of sulphur in saccharin and as a qualitative test for oxidation products, H_2SO_4, NH_3 and benzyl alcohol.—Ztschr. Unters. Nahr.-u. Genussm. 1917, v. 33, p. 384–388 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 384–393.

Murayama, G., et al.: An account of the manufacture of saccharin according to the process of the Heyden Co., Germany.—J. Pharm. Soc. Japan, 1918, No. 438, p. 632–643.

Kippenberger, C.: A note on the adulteration of saccharin with starch.—Chem. Ztg. 1917, v. 41, p. 848, through Chem. Zentralbl, 1918, v. 89, part 1, p. 127.

Hefelmann: A method for the determination of saccharin consists in heating the material with sulphuric acid, distilling the filtrate with magnesium and titrating the ammonia liberated in the usual manner.—Pharm. Post, 1917, v. 50, p. 675, through Schweiz. Apoth.-Ztg. 1918, v. 56, p. 145.

Richmond, H. D., and Hill, C. A.: A criticism of the various methods available for the analysis of saccharin. A method for the estimation of o-benzosulphonimide from the ammonia produced by acid hydrolysis is described.—J. Soc. Chem. Ind. 1918, v. 37, p. 246–249T.

Bonis, A.: Methods for the quantitative determination of saccharin and sodium saccharinate in compressed tablets are described.—Ann. Falsif. 1918, v. 11, p. 369–372.

Richmond, H. D., et al.: A report on the examination of 219 samples of saccharin tablets, the manufacture of which is controlled in England. Forty-eight per cent conformed with the standard and the remainder were within 10 per cent. One hundred and sixty-eight uncontrolled samples were far below the standard.—Analyst, 1918, v. 43, p. 402–404.

Fritsch, Vinzenz: Notes on artificial sweetening agents, especially saccharin, and descriptions of methods for their analysis.—Arch. chem. Mikros. 1918, v. 11, p. 57–73, 95–107, 158.

Lea, E. J.: One sample of saccharin examined was rejected.—Rep. California Bd. Health, 1918, p. 167.

Best: From an investigation, it is concluded that saccharin in customary doses produces no harmful effect on gastric digestion.—Münch. med. Wchnschr. 1917, v. 64, p. 1231–1232, through Physiol. Abstr. 1917, v. 2, p. 623.

BERBERIS, N. F.

Ilvento, A.: Attention is directed to the value of decoctions of berberis in the treatment of malaria.—Annali d'Igiene, 1918, v. 28, p. 358, through J. Am. M. Assoc. 1918, v. 71, p. 1618.

BETANAPHTHOL.

Palet, Luciano P. J.: An account of the identification of pyramidon and the differentiation of the naphthols by means of oxidases.—Ann. soc. quim. Argentina, 1918, v. 6, p. 250–257.

BISMUTHI SUBGALLAS.

Rahn, J.: One lot of bismuth subgallate examined contained an excess of sulphate.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

BISMUTHI SUBNITRAS.

Enz, K.: The zinc chloride test of the Ph. Germ. for arsenic in bismuth subnitrate is stated to give unsatisfactory results if carried ut in daylight.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through harm. Zentralh. 1918, v. 59, p. 351.

Luce, E.: The method of the French Codex for the estimation of itric acid in bismuth subnitrate is said to yield results which are naccurate. A method described by the author is based on the oxida-ion of oxalic acid added in excess, and the subsequent determination f this excess by the usual method.—J. pharm. et chim. 1918, v. 17, . 349–359. See also Bull. Soc. Chim. France, 1918, v. 23, p. 264–271.

Frary, Guy G.: Two samples of bismuth subnitrate examined came p to standard.—Rep. South Dakota F. & D. Com. 1918, p. 64.

BROMUM, N. F.

Anon.: Eleven plants in Michigan, Ohio, and West Virginia pro-luced about 903,860 pounds of bromine in 1917, an increase of 215,000 ounds over 1916.—Chem. & Drug. 1918, v. 90, p. 316.

Cesares, José, and Tastet, A.: A modification of Guareschi's nethod for the detection and estimation of bromine, with special eference to its detection in mineral waters.—Anal. soc. españ. fis. uim. 1918, v. 16, p. 226–228, through J. Chem. Soc. Lond. 1918, v. 14, part 2, p. 330.

Denigès, G., and Chelle, L.: A method for avoiding the influence f nitrous acid in the detection of bromine by the magenta-sulphuric cid method is described.—Ann. chim. analyt. 1918, v. 23, p. 81–83.

BUCHU.

Farwell, O. A.: The species of buchu should be named as follows: *arapetalifera betulina* (Thumberg) N. Comb. and *Parapetalifera erratifolia* (Curtis).—Drug. Circ. 1918, v. 62, p. 535.

Honaker, Samuel W.: A consular report giving an account of the ultivation of buchu in South Africa.—Com. Rep. 1918, No. 136, p. 70. See also J. pharm. et chim. v. 18, p. 247–249 and van Wielligh, Schweiz. Apoth.-Ztg. 1918, v. 56, p. 698.

Rindl, M. M.: Phytochemical research. It is reported that buchu (*Barosma betulina, B. serratifolia* and *B. crenulata*) has been adul-erated with *Empleurum serratulum*, which is therapeutically value-ess.—South African J. Sci. 1917, v. 14, p. 48–63, through Chem. Abstr. 1918, v. 12, p. 1053.

CACAO PRÆPARATA, N. F.

Rocques and Touplain: A study of analytical methods for distin-uishing between alkaline and natural cocoas.—Ann. Falsif. 1918, v. 11, p. 19–26.

Prescher, J.: The results of three experiments are given showing he adulterants used in cocoa. Sugar, brick-dust, shell, turnip, and coffee are among the adulterants mentioned.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 36, p. 288.

McGill, A.: Analytical data relative to the composition, nutritive value and standards for cocoa in force in the United States and the United Kingdom are discussed. Adulteration as practiced with respect to this product is also considered.—Bull. Lab. Inl. Rev. Dept. Canada, 1918, No. 418, p. 3-18.

Baker and Hulton: Difficulties encountered by chemists in estimating small quantities of shell in cocoa are pointed out.—Chem. News, 1918, v. 117, p. 203.

Keller, O.: A simple trustworthy method for estimating the amount of husks contained in cocoa powders. The method is based on the observation that the ethereal extract of pure cocoa kernels is colorless or faintly yellow, while the extract of the husks is distinctly brown.—Arch. Pharm. 1917, v. 255, p. 405–416, through J. Soc. Chem. Ind. 1918, v. 37, p. 37.

Huss, H.: A note on the Congo red-brilliant blue method for the microscopic detection of cocoa shells.—Ztschr. Unters. Nahr.-u. Genussm. 1916, v. 32, p. 404–407, through Ztschr. wiss. Mikros. 1917, v. 34, p. 193.

Juul, K.: Notes on the quantitative determination of cocoa shell in cocoa powder. An abstract.—Apoth.-Ztg. 1918, v. 33, p. 44.

Boericke, F.: An illustrated description of a filtering apparatus for the rapid determination of fat in powdered cocoa.—Pharm. Zentralh. 1916, v. 57, p. 795-797.

Kreis, Hans: Data obtained in the determination of fat in cocoa are presented and discussed.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 333–335.

Schaffer, F.: The average results obtained in the analysis of six samples of cocoa are given.—Mitt. Lebensm. Hyg. 1918, v. 9, p. 216, through Chem. Zentralbl. 1918, v. 89, part 2, p. 636.

CAFFEINA.

Suzuki, K.: Japanese patent No. 31,014. Caffeine is obtained by heating tea dust in an iron pan.—Chem. Abstr. 1918, v. 12, p. 203.

Deutsche Pharmaceutische Gesellschaft: A rapid method for carrying out the murexide test for caffeine is described.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 376.

Tunmann, O.: The application of the Stas-Otto method to the detection of caffeine is described.—Apoth.-Ztg. 1918, v. 33, p. 443, 447–448.

Ferneau, A.: A description of a method for the determination of caffeine in Antipyrina Caffio-salicylas.—Ztschr. allgem. öesterr. Apoth.-Ver. 1917, v. 55, p. 401, through Pharm. Zentralh. 1918, v. 59, p. 114.

Palet, Lucien P. J.: Different results are obtained in the determination of caffeine in maté, depending on whether the alkali used is ime, magnesia, or ammonia.—Ann. Chim. analyt. 1918, v. 23, p. 26–27.

Salant, William, and Connet, Helene: A report of physiological ests with 1:7:9-trimethyl-2:8-dioxy-purine, an isomer of caffeine. Its action in every respect was weaker than that of caffeine.—Proc. Soc. Exper. Biol. & Med. 1917, v. 15, p. 9.

CAFFEINÆ SODIO-BENZOAS.

Lyons, A. B.: Official standards for caffeine sodio-benzoate. Attention is directed to the wide variation in this product permitted by the U. S. P.—J. Am. Pharm. Assoc. 1918, v. 7, p. 1029–1030.

CALCII BROMIDUM.

Kellner, Georg: The melting point of anhydrous calcium bromide is given as 730° C.—Ztschr. anorg. Chem. 1917, v. 99, p. 173–183, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 469.

Anon.: One sample of calcium bromide examined proved to be of U. S. P. quality.—Bull. Vermont Bd. Health, 1918, v. 18, No. 3.

CALCII CARBONAS PRÆCIPITATUS.

Statham, N.: U. S. patent No. 1,266,339. Light precipitated chalk is produced by spraying an aqueous solution of calcium hydroxide (density 25 to 35° Twaddell) through an atmosphere of gas rich in CO_2 and maintained under a pressure of 60 to 80 pounds per square inch.—Chem. Abstr. 1918, v. 12, p. 1692.

Lefeldt, M. A.: A criticism of the Ph. Germ. method of testing for magnesium salts in precipitated calcium carbonate.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 162–163.

Gavazzi, Alfredo: Data relative to the solubility of calcium carbonate in boiling water are presented.—Gazz. chim. ital. 1917, v. 47, part 2, p. 49–63.

Van't Kruys, M. J.: Comments on Scheibler's apparatus for the determination of carbon dioxide in calcium carbonate.—Chem. Weekblad, 1918, v. 15, p. 870–872.

Roberts, J. G.: Of five lots of precipitated calcium carbonate examined, two were not of U. S. P. quality. One was 4.3 per cent low in strength and the other contained about 25 times more water-soluble material than is permitted by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

CALCII GLYCEROPHOSPHAS.

Éwe, George: Precipitation in the sterilization of solutions o calcium glycerophosphate in ampoules can be avoided by rendering acid with hydrochloric acid to the extent of 0.2 to 0.8 per cent.—Proc. Pennsylvania Pharm. Assoc. 1918, v. 41, p. 164.

Rahn, J.: One lot of calcium glycerophosphate examined contained a slight excess of chlorides and of sulphates.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

Engelhardt, H.: A few small shipments of calcium glycerophosphate examined contained too large an excess of chlorides.—Proc Maryland Pharm. Assoc. 1918, p. 81.

Anderson, George A.: Two shipments of calcium glycerophosphate examined contained an excess of chlorides.—Proc. N. W. D. A. 1918 p. 229.

CALENDULA, N. F.

Rusby, H. H.: There has been an exceptionally short supply of calendula in the past year and the price has been exorbitant. It is being cultivated to quite a large extent in this country this year.—Proc. New York Pharm. Assoc. 1918, p. 193.

Gregory, William M.: Notes on the use of calendula as an antiseptic and germicide.—Nat. Eclect. M. Assoc. Quart. 1918, v. 10, p. 211–215.

CALUMBA.

Feist, K., and Sandstede, G.: A review of the literature on the basic constituents of calumba root and a study of its alkaloids, palmatine, columbamine, and jatorrhizine.—Arch. Pharm. 1918, v. 256, p. 1–32.

CALX.

Woodhead, S. A.: A report of an investigation to determine the rate of deterioration of lime on storing under different conditions.—Analyst, 1918, v. 43, p. 161–165.

Meade, R. K.: Directions for the valuation of lime intended for use in building and in the chemical industries are given.—J. Ind. & Eng. Chem. 1918, v. 10, p. 214–219.

Washburn, Edward W.: The latent heat of fusion of calcium oxide is given as 28,000 (±20%) calories per mole or 490 calories per gram.—Trans. Am. Ceram. Soc. 1917, v. 19, p. 195–200, through Chem. Abstr. 1918, v. 12, p. 522.

Busveld, N.: A description of a method for the determination of calcium oxide in the presence of carbonate. An abstract.—Pharm. Weekblad, 1918, v. 53, p. 48.

Freudenheim, M. E.: A study of the reaction of lime with acetone vapor at temperatures between 350° and 630° C.—J. Phys. Chem. 1918, v. 22, p. 184–193.

Metcalf, Z. P.: Notes on the use and value of lime as an insecticide.—J. Econ. Entomology, 1917, v. 10, No. 1, p. 74–78, through Chem. Abstr. 1918, v. 12, p. 599.

Ewe, G.: One lot of calcium oxide (medicinal) examined was rejected because it was air-slaked.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

CALX CHLORINATA.

Rettie, T. J., et al.: A bleaching powder which is stable in hot climates can be prepared by mixing ordinary bleaching powder with freshly burnt quicklime to the extent of 10 to 15 per cent.—J. Soc. Chem. Ind. 1918, v. 37, p. 392R.

Lefeldt, M.: The method prescribed by the German pharmacopœia for determining the chlorine in chlorinated lime is stated to be unsatisfactory because of the manner in which an aliquot portion of the solution containing the suspended material is taken. An improved method is proposed.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 162.

Chevrier, D.: Methods for the determination of the constituents of chlorinated lime are described.—Bull. soc. pharm. Bordeaux. 1918, v. 56, p. 59–62.

Kolthoff, I. M.: A method for the determination of hypochlorites and chlorates in the presence of each other is described. In the determination of HOCl by oxidation of As_2O_3, the author recommends using indigo or methyl red in acid solution as the indicator instead of KI starch paper, which is commonly used.—Pharm. Weekblad, 1918, v. 55, p. 1289–1295.

Lecompte, Octave: A description of a new method for the estimation of chlorine in chloride of lime and solutions of hypochlorites. The method makes use of the fact that the active chlorine of a hypochlorite and potassium permanganate react with stannous chloride to form stannic chloride.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 217–218.

Rupp, E.: A method for the determination of chlorates and hypochlorites in the presence of each other is described.—Ztschr. anal. Chem. 1917, v. 56, p. 580–586, through J. Soc. Chem. Ind. 1918, v. 37, p. 205A.

Taylor, R. L.: Data are presented showing the rate of deterioration of bleaching powder solutions due to the action of light.—J. Soc. Dyers Colourists, 1917, v. 33, p. 246–250, through Chem. Abstr. 1918, v. 12, p. 979.

Bachman, Gustav: The assay for available chlorine in 3 cans of chlorinated lime ranged from 9.5 to 28 per cent. The U. S. P. requirement is 30 per cent of available chlorine.—Proc. Minnesota Pharm. Assoc. 1918, p. 119; Northwestern Drug. 1918, v. 19, No. 4, p. 52.

Snapp, F. L.: Of 6 samples of chlorinated lime examined, 4 were rejected.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

Van der Harst, J. C., and Koers, C. H.: Some bleaching powders on the market in Holland are reported to contain no available chlorine, or less than 2 per cent.—Pharm. Weekblad, 1918, v. 55, p. 578–579.

Horn, D. W.: The use of bleaching powder in place of potassium permanganate in formaldehyde disinfection is recommended for economical reasons.—Am. J. Public Health, 1918, v. 8, p. 161.

Egidi, G.: The value of bleaching powder for sterilization of the skin is emphasized.—Policlinico, 1918, v. 25, p. 1023, through J. Am. M. Assoc. 1918, v. 71, p. 2112.

CAMBOGIA.

Anderson, George A.: Of 6 samples of gamboge examined, 5 showed a solubility of 75 per cent to 79 per cent in alcohol and 1 of only 59 per cent.—Proc. N. W. D. A. 1918, p. 239.

CAMPHORA.

Farwell, O. A.: The species of the plant from which camphor is obtained should be designated *Camphorina camphora* (Linné) N. Comb.—Drug. Circ. 1918, v. 62, p. 535.

Dubosc, André: An account of the synthetic production of camphor in France, England, and Germany.—Rev. prod. chim. 1918, v. 21, p. 369–372.

Frydlender, J. H.: A review dealing in part with the production of synthetic camphor.—Rev. prod. chim. 1918, v. 21, p. 50–52.

Anon.: A short note on the production and use of camphor.—Pharm. Era, 1918, v. 51, p. 301.

Guerbet, M.: Notes on the preparation and properties of bornylene camphor and a new condensation product of camphor, isodicamphor.—J. pharm. et chim. 1918, v. 17, p. 97–104.

The Suzuki Shop: Japanese patent No. 31711. Camphor is purified by extraction from the crude material with a volatile solvent and subsequent removal of the solvent by distillation under pressure.—Chem. Abstr. 1918, v. 12, p. 1236.

Crane, J. E.: Canadian patent No. 187,173 describes the purification of camphor by heating to 300° to 500° F. in a closed chamber, thereby rendering the camphor oil less soluble in organic solvents.—Chem. Abstr. 1918, v. 12, p. 2661.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the natural camphor now official in the Ph. Germ. be replaced by synthetic camphor, provided the latter is found to be of equal therapeutic value.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 375.

Lefeldt, M.: The test for camphor as given in the Ph. Germ. is riticized. It is recommended that synthetic camphor also be admitted to the German pharmacopœia and that a test for the detection f chlorine therein be prescribed.—Ber. deutsch. pharm. Gesellsch. 917, v. 27, p. 163.

Leo, H.: The intravenous injection of camphor is recommended n pneumonia. Its value is attributed to its antibacterial action toward pneumococcus.—Deutsch. med. Wchnschr 1918, v. 44, p. 284–86 through Physiol, Abstr. 1918, v. 3, p. 273.

CANNABIS.

Anon.: An editorial commenting on the appearance of American annabis on the London drug market.—Chem. & Drug. 1918, v. 90, . 530.

Cushman, Allerton S.: In an article dealing with the growing of medicinal plants in America, it is stated that the dried flowering male tops of *Cannabis indica* grown in the United States possessed reater physiological activity than a U. S. P. sample of dried flowering unfertilized female tops.—J. Franklin Inst. 1918, v. 186, p. 267–78.

Hamilton, H. C.: From experiments, it is concluded that the rate f deterioration of *Cannabis sativa* and its extract is much slower han it is generally believed to be, and that for practical purposes eterioration may be ignored.—J. Am. Pharm. Assoc. 1918, v. 7, . 333–336.

Busquet, H.: The author is rather skeptical with respect to the alue of the physiologic method for the assay of cannabis because f the difficulty of administering the drug to the dogs, and because ot all animals show incoordination, some merely showing dullness nd stupor.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 87.

Fuller, H. C.: The possibility of using cannabis to replace opium n the treatment of certain diseased conditions is pointed out.—J. m. Pharm. Assoc. 1918, v. 7, p. 431.

Engelhardt, H.: The samples of Indian hemp examined answered ll the physiological tests prescribed by the U. S. P., but the samples f domestic hemp were generally far below the official requirements.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

CAPSICUM.

Anderson, George A.: A number of lots of capsicum have been sted for activity by the physiological test of tasting a very high ilution of the alcohol extract. As a whole, the supplies this year ave been below normal and some of the drug has been very poor indeed.—Proc. N. W. D. A. 1918, p. 239.

CARBO ANIMALIS (NONOFFICIAL).

Wiechmann, F. G.: The manufacture, uses, and action of bone black are fully described.—Sugar. 1917, v. 19, p. 434–437, throug Chem. Abstr. 1918, v. 12, p. 319.

Keenan, F.: One lot of purified animal charcoal examined contained 6.9 per cent of ash. The U. S. P. VIII allows only 4 per cen of ash.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

Anon.: Incarbon is stated to be a suspension of a highly activ sterile blood charcoal for intravenous use. It forms stable compound with toxic doses of diphtheria and tetanus toxins when the latte are injected into the blood stream.—Pharm. Zentralh. 1917, v. 5 p. 617–618.

CARBO LIGNI.

Zerban and Freeland: The preparation of charcoal from Pacifi coast kelp is described.—J. Ind. & Eng. Chem. 1918, v. 10, p. 812.

Sauer, J.: Some improvements in the manufacture and use o "norit" are described.—Intern. Sugar J. 1918, v. 20, p. 24–29, throug Chem. Abstr. 1918, v. 12, p. 1008.

Knopflmacher, A.: Norwegian patent No. 28,579 describes th preparation of a highly active decolorizing carbon from sulphite-cellulose waste.—Chem. Abstr. 1918, v. 12, p. 1598.

Garner, J. B.: U. S. patent No. 1,262,770. Wood charcoal is purified by heating for a prolonged period at 250°–275° C. in an iner atmosphere and then heated under reduced pressure to remov occluded gases.—Chem. Abstr. 1918, v. 12, p. 1590.

Caesar and Loretz: An ash content of 10 per cent is suggested as suitable standard for wood charcoal.—Pharm. Zentralh. 1918, v. 59 p. 28.

Lemon, H. B.: A study of the variations in the absorptive powe of certain specimens of cocoanut charcoals.—Phys. Rev. 1916, v. p. 336–337, through Chem. Abstr. 1918, v. 12, p. 1719.

Merck, E.: Notes on charcoal for medicinal use.—Pharm. Zentralh 1917, v. 58, p. 193–195.

CARDAMOMI SEMEN.

Anon.: Notes on the production of cardamon fruit in India.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 69.

Anon.: The exports of cardamon from Ceylon amounted to 367,82 pounds for 1917, which is 73,840 pounds less than in 1916.—Chem. Drug. 1918, v. 90, p. 1037.

Anon.: Examination of the importations of cardamon seeds ha revealed the presence of considerable amounts of foreign material consisting of small pebbles and the seeds of an unidentified species o *Amomum*.—Pract. Drug. 1918, v. 36, No. 12, p. 38.

CARUM.

Anon.: A note on the substitution of Levant, or Tunis caraway, id of Indian dill seed (*Peucedanum Sowa*) for the official caraway ed.—Chem. & Drug. 1918, v. 90, p. 796.

CARYOPHYLLUS.

Farwell, O. A.: If cloves and its allies are to be kept separate om *Eugenia*, as insisted upon by many botanists, the proper bi- omial is *Caryophyllus aromaticus*, Linné.—Drug. Circ. 1918, v. 62, 535–536.

Huss, Harald: In 25 samples of cloves examined at Stockholm, an erage of 5.06 per cent of foreign matter was found. The alleged iating test for inferior cloves in water at 15° to 20° is stated not to fferentiate between sound cloves and those from which the oil has en removed.—Svensk farm. Tidjskr. 1918, v. 22, p. 373–377 and 1–394.

Bachmann, F. M.: Experiments with the use of bacteria, yeasts and olds to determine the preservative value of cloves, cinnamon and lspice are described.—J. Ind. & Eng. Chem. 1918, v. 10, p. 121–123.

CASCARA SAGRADA.

Westman, L. E., and Rowat, R. M.: The manganese content of iscara sagrada bark, computed on a dry basis at 110° C., is given as 0137–0.0223 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

Kofler, L.: A discussion of microchemical methods for the detec- on of hydroxymethylanthraquinone in cascara sagrada.—Ztschr. terr. Apoth.-Ver. 1918, v. 56, p. 231–232, through Chem. Zentralbl. 18, v. 2, p. 676.

Tunmann, O.: It is recommended that cascara sagrada be deleted om the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 307.

Todd, A. R.: One sample of cascara sagrada examined was of andard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

CASCARILLA, N. F.

Ewe, G.: Of two lots of cascarilla bark examined, one was of poor iality, containing excessive dirt and some pebbles, shells, berries, id nails. Another lot was practically devoid of odor.—Proc. Penn- lvania Pharm. Assoc. 1918, p. 102.

CATARIA, N. F.

Editorial: A description of catnip, with notes on its therapeutic roperties.—Eclectic M. J. 1918, v. 78, p. 313–314.

CAULOPHYLLUM, N. F.

Editorial: A botanical description of squaw root, with notes o its medicinal uses.—Eclectic M. J. 1918, v. 78, p. 256–257.

CERA FLAVA.

Kablukov, I. A., and Girshberg, E. G.: Researches on the compo sition of beeswax are reported.—Bull. acad. sci. Petrograd, 1918, 771–776, through Chem. Abstr. 1918, v. 12, p. 1932.

Ueno, S.: The physical and chemical constants of beeswax obtaine from the Ogasawara Islands are given.—J. Chem. Ind. Japan, 191 v. 21, p. 319–320, through Chem. Abstr. 1918, v. 12, p. 2138.

Buchner, Georg, and Fischer, Hanns: Analytical data relative t East Indian bees-wax (Ghedda wax) and so-called China wax a presented.—Ztschr. öffentl. Chem. v. 19, Nos. 8, 9, and 10, throug Pharm. Zentralh. 1918, v. 59, p. 52.

Fischer, Hanns: A note on Korean and Japanese beeswax.—Ztsch öffentl. Chem. v. 22, p.181, through Pharm. Zentralh. 1918, v. 59, p. 5

Berger, Fr.: Notes on bees' honey and wax and their use as ther peutic agents.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 350–353, 366–37 382–384, 395–397, 409–411, 436–439.

Anon.: As a basis for arriving at the purity of beeswax, u is made of the free-acid and the combined acid indices. Data of th nature are presented. An abstract.—Ann. chim. analyt. 1918, v. 2 p. 115.

Deutsche Pharmaceutische Gesellschaft: The Ph. Germ. metho for the determination of the ester number of beeswax is criticize Berg's xylol method is stated to be more satisfactory.—Ber. deutsc pharm. Gesellsch. 1918, v. 28, p. 375.

Lefeldt, M.: It is suggested that the Ph. Germ. should prescri a test for the detection of stearic acid and resin in beeswax.—Be deutsch. pharm. Gesellsch. 1917, v. 27, p. 163–164.

Van Dorssen, S.: Methods for the detection of stearic acid, resi paraffin, Japanese wax and Carnauba wax, when present as adulte ants in beeswax are described.—Olien en Vetten, 1918, v. 2, p. 361–36 through Chem. Weekblad, 1918, v. 15, p. 843.

Schneider: A method for the detection of stearin in beewsax d pends on the fact that the former assumes a green color when treate with copper sulphate solution.—Pharm. Post, 1917, v. 50, p. 47 through Schweiz. Apoth.-Ztg. 1918, v. 56, p. 145.

Verda, A.: An aqueous solution of a copper salt is used to dete the presence of stearic acid in beeswax. Pure beeswax is colore yellow or pale green with this reagent. If stearic acid is presen the color becomes decidedly green.—Les Matières grasses, Jan. 191 through Rev. chim. industrielle, 1920, v. 27, p. 37.

Bohrisch, P.: A report on the examination of yellow wax, with ecial reference to its saponification. Of 36 samples gathered from idely separated districts in Germany during the war, 75 per cent ere adulterated, 27 being admixed with paraffin or ceresin and 6 ith stearic acid.—Apoth.-Ztg. 1918, v. 33, p. 34–36, 40–43, 49–52, –63, 72–74, 85–86, 109–110, and 123–126, through Chem. Zentralbl. 18, v. 2, p. 225.

Anderson, George A.: One lot of beeswax examined was adulter-ed with paraffin.—Proc. N. W. D. A. 1918, p. 236.

CERATA.

Anon: Five formulas for the preparation of ambrine substitutes e given.—Chem. & Drug, 1918, v. 90, p. 13.

Holliday, K. J.: U. S. patent No. 1264185. An elastic non-acking surgical dressing consists of paraffin, 65 to 95 per cent; eswax, 5 to 35 per cent; and gum elemi or a similar gum, 0.1 to 5 r cent.—Chem. Abstr. 1918, v. 12, p. 1688.

Besson, A.: Several modern formulæ for cerates which have been und to be useful in the dressing of wounds are given.—L'Union arm. 1918, v. 59, p. 248.

CERATUM CAMPHORÆ, N. F.

Monteith, J. D.: An improved formula for a camphor cerate con-ins white mineral oil, 20 parts; paraffin, 20 parts; spermaceti, 5 rts; and camphor, 20 parts.—Apothecary, 1918, v. 30, No. 5, p. 36.

CEREVISIÆ FERMENTUM COMPRESSUM, N. F.

Slator, Arthur: Some observations on yeast growth.—Biochem. 1918, v. 12, p. 248–258.

Petit, P.: The preparation of yeast for use as a foodstuff is de-ribed.—Brasserie et Malterie, 1917, v. 7, p. 257–260, through Chem. bstr. 1918, v. 12, p. 1089.

Crowther, C., and Woodman, H. E.: Feeding experiments on sheep ow a very high order of digestibility for dried yeast.—J. Agric. ience, 1917, v. 8, p. 448–450.

Ivanov, Nicolaus: Researches dealing with the nature of the oteolytic enzyme of yeast are reported.—Biochem. J. 1918, v. 12, 106–119.

Vautier, E.: A brief discussion of Hayduck's method for de-mining the fermenting power of yeast and a criticism of it based the results obtained by the author.—Mitt. Lebensm. Hyg. 1918, 10, p. 98–101.

Lubsen, C. A.: A report of investigations dealing with the d termination of the nuclein content of yeast.—Pharm. Weekbla 1918, v. 55, p. 1625–1628.

Drummond, J. C.: A study of the water-soluble accessory growth promoting substance in yeast.—Biochem. J. 1917, v. 11, p. 255–27

CETACEUM.

Deutsche Pharmaceutische Gesellschaft: It is recommended tha the next edition of the German pharmacopœia omit standards f specific gravity in the case of spermaceti, as this constant can b only approximately determined. The Ph. Germ. tests for the pre ence of stearic acid are stated to be valueless.—Ber. deutsch. pharm Gesellsch. 1918, v. 28, p. 200–201.

CHLORALUM HYDRATUM.

Anon.: The British imports of chloral hydrate for the years 191 1917 were 23,501 lbs., 27,296 lbs., 51,337 lbs., 60,550 lbs., and 41,0 lbs.—Chem. & Drug. 1918, v. 90, p. 876.

H. K. Mulford Co.: The method used in the Mulford analytic laboratories for the determination of chloral hydrate in compresse tablets is described in detail.—Drug. Circ. 1918, v. 62, No. 2, p. 27.

Anon.: Iodine is precipitated from solutions of chloral hydrate an potassium iodide on warming.—Südd. Apoth.-Ztg. 1918, v. 58, 259, through Pharm. Zentralh. 1918, v. 59, p. 245.

CHLOROFORMUM.

Ukita, K.: A description of Besson's method for the preparati of chloroform from ethyl alcohol.—J. Chem. Ind. Tokyo, 1918, v. 2 p. 216–219, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 33

Joure, A.: For the preservation of chloroform, the addition of 0 per cent of inactive terpineol is recommended.—Répert. pharm. 191 v. 29, p. 188.

Vorländer, D.: The presence of hydrochloric acid in chlorofor may be detected by adding a minute particle (about 0.01 mg.) p-dimethylaminoazobenzene to 10 cubic centimeters of the sampl A violet-red coloration indicates the presence of free hydrochlo acid.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 385–388.

Enz, K.: It is recommended that the new edition of the Ph. Ger specify the use of Nessler's reagent for the detection of the presen in chloroform of compounds possessing properties similar to that chloral.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Phar Zentralh. 1918, v. 59, p. 351.

Anon.: It is suggested that the test for choloroform requiring agitation with pure sulphuric acid be discontinued in the Ph. Germ.—Pharm. Zentralh. 1918, v. 59, p. 207.

Lefeldt, M.: It is recommended that the benzidine test for the purity of chloroform proposed by Budde be introduced into the German pharmacopœia. This test is stated to accurately indicate the presence of phosgene, chlorine, and free hydrochloric acid.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 164; see also Utz, Pharm. Zentralh. 1917, v. 58, p. 1–5.

Deutsche Pharmaceutische Gesellschaft: It is suggested that the benzidine test for impurities in chloroform be given as follows in the new edition of the Ph. Germ.: " If 10 cubic centimeters of chloroform are shaken with 0.05 gram of benzidine and protected from the light, no turbidity or color should develop within 12 hours.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 375–376.

Raikow, Theodora P.: An explanation of the reducing action of chloroform on Fehling's solution. Reduction is attributed to the action of CO.—Ztschr. angew. Chem. 1917, v. 30, p. 278–280; see also Kippenberger, ibid. p. 307, and Margosches, ibid. p. 307, through Chem. Zentralbl. 1918, v. 89, part 1, p. 478–479.

Burge, W. E.: An experimental study to determine why chloroform is a more powerful and dangerous anesthetic than ether.—Science, 1917, v. 46, p. 618–620.

Rengniez: Notes on the antiseptic properties of the vapors of chloroform as shown by the use of chloroform bandages.—Bull. sc. pharmacol. 1918, v. 25, part 2, p. 11–12.

Cabanes, A.: An alcoholic solution of chloroform (1 in 6) is found to be an efficient antiseptic if sprayed on wounds after proper surgical treatment.—J. pharm. et chim. 1918, v. 17, p. 180.

Roberts, J. G.: Two lots of chloroform examined had specific gravities a little higher than the U. S. P. standard. A trace of free chlorine was found in one lot.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

Anderson, George A.: One sample of chloroform examined contained a decided trace of organic compounds and gave a strong test for acetaldehyde.—Proc. N. W. D. A. 1918, p. 239.

CHROMII TRIOXIDUM.

Stollé, R.: Pure chromic acid, free from sulphuric acid, does not deliquesce in air as stated in the Ph. Germ.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 628.

CHRYSAROBINUM.

Lefeldt, M.: A criticism of the solubility test of the Ph. Germ. for chrysarobin. It is stated that on an average not over 90 per cent of the chrysarobin is soluble in the amount of water specified.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 164–165.

CINCHONA.

Anon.: An account of the trade in cinchona bark, including the results obtained in the alkaloidal assay of samples of bark from St Helena and East Africa.—Bull. Imp. Inst. 1918, v. 16, p. 370–388.

Haeussler, E. P.: A history of cinchona bark and its substitutes.—Südd. Apoth.-Ztg. 1918, v. 58, p. 191–192 and 196, through Chem. Zentralbl. 1918, v. 2, p. 395.

Rusby, H. H.: Effect of the war on cinchona production. Ceylon plantations have practically been replaced by tea plantations and the plantations of the East Indies and South America can not meet the present demands.—Drug. Circ. 1918, v. 62, p. 275.

Anon.: This season the Tjiliwoeng Java Plantations produced 11,730 lbs. of cinchona bark, assaying 8.35 per cent of quinine, as compared with 26,240 lbs. the previous season.—Chem. & Drug. 1918, v. 90, p. 838.

Anon.: Consular advices report that the cultivation of cinchona plants is being attempted by the Igorot Exchange on the Island of Luzon, the largest of the Philippine Islands.—Pharm. Era, 1918, v. 51, p. 314.

Anon.: The imports of cinchona into the United Kingdom for the years 1913 to 1917 are given as 26,122 cwt., 33,346 cwt., 20,416 cwt., 27,141 cwt., and 33,934 cwt., respectively. The reexports were 18,621 cwt., 15,188 cwt., 7,220 cwt., 8,940 cwt., and 15,669 cwt.—Chem. & Drug. 1918, v. 90, p. 1049.

Wherry, Edgar T., and Yanovsky, Elias: Experiments in the identification of the cinchona alkaloids by optical-crystallographic measurements. Determinative tables are given, and it is shown how quinine, cinchonidine, and cinchonine were identified in pills.—J. Am. Chem. Soc. 1918, p. 40, p. 1063–1074.

Wherry, Edgar T., and Yanovsky, Elias: A correction of minor errors in a paper on the identification of cinchona alkaloids by optical crystallographic measurements abstracted in Chem. Abstr. 1918, v. 12, p. 1780.—J. Am. Chem. Soc. 1918, v. 40, p. 1955–1956.

Engelhardt, H.: Four shipments of cinchona calisaya and two shipments of red cinchona examined were of U. S. P. quality.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

Ewe, G.: Three lots of yellow cinchona (Brazilian) examined assayed 1.73, 2.14, and 3.62 per cent total alkaloids, respectively.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

Rabe, Paul, and Kindler, Karl: Researches on the cinchona alkaloids. XIX. A partial synthesis of quinine.—Ber. deutsch. chem.

iesellsch. 1918, v. 51, p. 466–467; J. Chem. Soc. Lond. 1918, v. 114, . 303.

Rabe, Paul, and Kindler, Karl: Contributions to the chemistry of ie cinchona alkaloids. XX. The synthesis of quinotoxines.—Ber. eutsch. chem. Gesellsch. 1918, v. 51, p. 1360–1365; Chem. Zentralbl. 918, v. 89, part 2, p. 733–734.

Giemsa, G., and Halberkann, J.: A report of investigations dealig with the cinchona alkaloids, cupreine, hydrocupreine, and their iethyl and ethyl ethers.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, . 1825–1833.

Lefeldt, M.: The Ph. Germ. method for the determination of alkaids in cinchona bark is stated to give inaccurate results. The iethod of Fromme published in Geschäfts-Bericht of Caesar and oretz, 1915, p. 51, is recommended as being a more suitable iethod.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 165.

Ziegler, J.: The Frerichs and Mannheim modification of Fromme's iethod for the determination of cinchona alkaloids is recommended or the new edition of the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 162.

CINCHONINÆ SULPHAS.

Léger, E.: A study of the action of hydrobromic and hydriodic cid on cinchonine and its isomers, cinchoniline, cinchonigine, and pocinchonine.—Compt. rend. acad. sc. 1918, v. 166, p. 76–79 and 69–472.

Léger, E.: An explanation of the mechanism of the formation of ertain isomers of cinchonine and their halogen derivatives.—Compt. end. acad. sc. 1918, v. 166, p. 255–258.

Wherry, Edgar T.: Observations on the application of optical iethods of identification to alkaloids and other organic compounds, ith special reference to cinchonine.—Bull. U. S. Dept. Agric. 1918, o. 679, p. 1–9.

Rogers, Leonard: Soluble cinchonine salts are stated to be equally s effective as quinine for intramuscular injection in malaria and are ss dangerous and more convenient to use.—Brit. M. J. 1918, v. 2, . 459–461.

CINNAMOMUM SAIGONICUM.

Farwell, O. A.: The plant which yields Saigon cinnamon should e designated *Camphorina saigonica*, n. sp.—Drug. Circ. 1918, v. 2, p. 535.

Westman, L. E., and Rowat, R. M.: The manganese content of innamon bark, computed on a dry basis at 110° C., is given as .0624 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

Bachmann, F. M.: Experiments with the use of bacteria, yeast and molds to determine the preservative value of cinnamon, clove and allspice are described.—J. Ind. & Eng. Chem. 1918, v. 10, 121–123.

CINNAMOMUM ZEYLANICUM.

Farwell, O. A.: The plant yielding Ceylon cinnamon should b designated *Camphorina cinnamomum* (Linné) N. Comb.—Dru Circ. 1918, v. 62, p. 535.

Anon.: Ceylon exported 2,555,542 lbs. of cinnamon in 1917, again 2,176,970 lbs. in 1916. Only 763,129 lbs. of chips were exported i 1917 against 2,835,523 in 1916.—Chem. & Drug. 1918, v. 90, p. 901.

COCA (NONOFFICIAL).

Farwell, O. A.: The proper spelling of the generic name for th coca plant is *Erothroxylum*.—Drug. Circ. 1918, v. 62, p. 536.

Anon.: Java exported 179,172 kilos of coca leaves in 1917 agains 386,628 kilos in 1916.—Chem. & Drug. 1918, v. 90, p. 516.

COCAINA.

Anon.: The British imports of cocaine and its salts for the year 1913 to 1917 were 55,346 oz., 28,480 oz., 66,603 oz., 55,914 oz., an 20,584 oz., respectively. The reexports of foreign make were 23,61 oz., 11,996 oz., 8,144 oz., 34,653 oz., and 9,069 oz. The exports o British make were 3,354 oz., 4,096 oz., 17,647 oz., 7,647 oz., and 1,25 oz.—Chem. & Drug. 1918 v. 90, p. 877.

Anon.: The Japanese imports of cocaine for the years 1915, 191 and 1917 were 68,366 oz., 78,275 oz., and 90,049 oz.—Chem. & Drug 1918, v. 90, p. 391.

Xrayser: The abandonment of the general pronunciation o "cocaine," in which the second syllable is accented, is urged. Th addition of the suffix should not, it is stated, affect the pronunciatio of the radical word.—Chem. & Drug, 1918, v. 90, p. 1919.

Tunmann, O.: The organoleptic test for cocaine is stated to be un certain. Frequently atropine is mistaken for cocaine in the applica tion of this test. Certain of the more reliable chemical tests are dis cussed.—Apoth.-Ztg. 1917, v. 32, p. 38, through Pharm. Zentral 1917, v. 58, p. 454–455.

Denigès: Microchemical methods for the identification of cocain and stovaine are described. Illustrated.—Bull. soc. pharm. Bor deaux, 1917, No. 4, p. 288–289.

Von Braun, J., and Müller, E.: A report of experimental wor dealing with the conversion of cocaine into new physiologicall active substances. One of the compounds obtained was found to be equal to atropine as a mydriatic, and the other to be equal to cocaine as a local anesthetic.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 235–252, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 233.

Sollmann, Torald: As a result of extensive experimental investigations, it is concluded that several of the synthetic anesthetics can completely take the place of cocaine. In view of this fact, it would be feasible to prohibit entirely the importation, manufacture, sale, and use of the habit-forming cocaine, except for scientific purposes.—Rep. Therap. Res. Com. 1918, v. 7, p. 11–12.

Roth, George B.: An investigation of the relative toxicity of cocaine and novocaine.—J. Nat. Dental Assoc. 1918, v. 5, p. 574–578, through Chem. Abstr. 1918, v. 12, p. 2019.

Turtur, G.: Necrotic ulceration of the septum has been found common among those who snuff cocaine.—Policlinoco, Rome, 1918, v. 25, p. 417, through J. Am. M. Assoc. 1918, v. 70, p. 2058.

LOCAL ANESTHETICS (NONOFFICIAL).

Anon.: The Committee on Therapeutic Research of the Council on Pharmacy and Chemistry of the American Medical Association has undertaken a study of the accidents following the clinical use of local anesthetics, especially those following ordinary therapeutic doses. It is hoped that this may lead to a better understanding of the cause of such accidents, and consequently to methods of avoiding or treating them successfully.—J. Am. M. Assoc. 1918, v. 70, p. 258.

Sollmann, Torald: An experimental study of the comparative efficiency of local anesthetics—cocaine, novocaine, tropacocaine, alypin, beta-eucaine, quinine-urea, and apothesin.—J. Am. M. Assoc. 1918, v. 70, p. 216–219.

Hamilton, H. C.: A comparison of the value of some local anesthetics. Apothesine is equal to, or exceeds, novocaine as a local anesthetic and in some respects is no less efficient than cocaine.—J. Lab. & Clin. Med. 1918, v. 4, p. 60–68.

Eggleston, Cary, and Hatcher, Robert A.: A preliminary report on the behavior of certain local anesthetics (substitutes for cocaine).—Proc. Soc. Exper. Biol. & Med. 1918, v. 16, p. 16–17.

Shiels, J. S.: Apothesine is a new local anesthetic which bears the same relation to propyl alcohol and cinnamic acid as novocaine does to alcohol and benzoic acid. It is nontoxic and produces anesthesia without pallor, syncope, or palpitation.—Dental Cosmos, 1918, v. 60, p. 298–300.

Macht, David I.: By means of laboratory experiments it was shown that benzyl alcohol possesses powerful local anesthetic properties and, at the same time, its toxicity is low compared with other local anesthetics. It is soluble in water up to 4 per cent and is easily sterilized.—J. Pharmacol. & Exper. Therap. 1918, v. 11, p. 263–279.

Macht, David I.: Benzyl benzoate and acetate act like papaverine on smooth muscle and give excellent results in the relief of smooth muscle spasm. They are less toxic than the opium alkaloid, are readily metabolized, and so are preferable.—J. Pharmacol. & Exper. Therap. 1918, v. 11, p. 419–446.

Anon.: Methods for the standardization of procaine (novocaine) are described. Data obtained in the examination of the market supply are also presented.—Rep. Lab. Am. Med. Assoc. 1918, v. 11, p. 48–53.

COCCUS.

Anon.: A note calls attention to the bleaching action of a solution containing sodium bromide and ammonium carbonate on cochineal.—Pacific Pharm. 1918, v. 11, p. 625.

CODEINA.

Rakshit, Jitendra Nath: Metallic derivatives of alkaloids. The preparation and properties of sodium and potassium derivatives of codeine are described.—J. Chem. Sco. Lond. 1918, v. 113, p. 466–471.

Soc. anon, por l'ind. chim. a Bâle: Swiss patent No. 76996 describes the preparation of a codeine diallylbarbituric acid.—Chem. Abstr. 1918, v. 12, p. 2112.

CODEINÆ PHOSPHAS.

Enz, K.: The sulphuric acid used in the Ph. Germ. test for codeine should not give a color reaction with sulphocyanate and diphenylamine. This should be stated in the new edition of the Ph. Germ.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 351.

CODEINÆ SULPHAS.

Roberts, J. G.: Two lots of codeine sulphate examined were somewhat yellow in color.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

COFFEA TOSTA, N. F.

McGill, A.: Analytical data obtained in the examination of coffee and coffee substitutes obtained on the Canadian market are presented.—Bull. Lab. Inl. Rev. Dept. Canada, 1918, No. 416, p. 3–6.

Griebel, C.: Notes on the microscopical examination of coffee substitutes. Diagrams are given showing the characteristic features of some of these substitutes.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 35, p. 233–235 and 272–277, through J. Soc. Chem. Ind. 1918, v. 37, p. 527A.

Tamhane, V. A.: A report on the roasted seeds of *Cassia tora*, a new coffee adulterant examined at Poona, British India.—Poona Agric. Coll. Mag. 1917, v. 9, p. 47–49, through Chem. Abstr. 1918, v. 12, p. 2219.

Anon.: Samples of coffee from Uganda were found on examination to be composed of 11 per cent. of parchment and 89 per cent. of bean.—Bull. Imp. Inst. 1918, v. 16, p. 24–30.

Block: Comments on Vautier's method for the determination of caffeine in coffee.—Schweiz. Wchnschr. Chem. u. Pharm. 1918, v. 56, p. 329–330, through Chem. Zentralbl. 1918, v. 89, part 2, p. 920.

Vautier, E.: Caffeine is determined in coffee by extracting the latter with ether, separating the fat with hot water and subliming the residue.—Mitt. Lebensm. Hyg. 1918, v. 9, p. 54–57; Ann. chim. analyt. 1918, v. 23, p. 207–210.

COLCHICI CORMUS.

Anderson, George A.: One lot of colchicum root examined was of very desirable quality and assayed 0.504 per cent of colchicine.—Proc. N. W. D. A. 1918, p. 230.

Engelhardt, H.: Four samples of colchicum root examined were of good quality.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

COLCHICINA.

Tunmann, O.: The application of the Stas-Otto method of shaking out to the detection of colchicine is described.—Apoth.-Ztg. 1918, v. 33, p. 443.

Éwe, G.: Two lots of colchicine examined yielded 12.35 and 13.4 per cent, respectively, of volatile matter at 100° C. The volatile matter consisted largely of chloroform.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

COPAIBA.

Sauer, Emil: Statistics showing the quantities of balsam of copaiba exported from Maracaibo for the years 1915 and 1916. In 1916, 69.478 pounds were exported to the United States.—Com. Rep. 1918, No. 48a, p. 5.

Anon.: Data showing the physical and chemical properties of balsam of copaiba from Colombia are given. The balsam satisfies the requirements of the Ph. Brit. and is suitable for medicinal use.—Bull. Imp. Inst. 1918, v. 16, p. 147–149.

Macri, V.: A comparison of the color tests prescribed by different authors and pharmacopœias for the detection of the adulteration of copaiba balsam with gurjun balsam gave no decisive results. The best results were obtained with the test described by Engelhardt and Dohme.—Boll. chim.-farm. 1918, v. 57, p. 41–44.

Anderson, George A.: Three lots of balsam copaiba examined gave a positive test for gurjun balsam when tested by the U. S. P. method. There is some question, however, as to the accuracy of this method.—Proc. N. W. D. A. 1918, p. 230–236.

CORIANDRUM.

Anderson, George A.: Bombay or Indian coriander has found its way to our drug markets during the past few years. It does not comply with the U. S. P. description, as it is oval in shape. It is not as aromatic as the U. S. P. variety, but, according to late reports, the Government will sanction its use.—Proc. N. W. D. A. 1918, p. 235.

Anon.: The seeds of *Coriandrum sativum* from Cyprus yielded 0.48 per cent. of a colorless oil on steam distillation.—Bull. Imp. Inst. 1917, v. 15, p. 297–313.

LaWall, C. H.: Of 8 samples of coriander examined, 3 contained foreign starch (leguminous) from weed seeds not removed by cleaning.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

CORYDALIS, N. F.

Legerlotz, H.: An investigation of the suitability of mercury acetate as an oxidizing agent for corydalis alkaloids.—Arch. Pharm. 1918, v. 256, p. 123–160, 161–192.

COTARNINÆ HYDROCHLORIDUM.

Hanzlik, Paul J.: From experiments, it is concluded that the haemostatic properties of cotarnine and sodium phthalate are very inferior as compared with epinephrine, and are probably completely absent.—Rep. Therap. Res. Com. 1918, v. 7, p. 24–41; J. Pharmacol. & Exper. Therap. 1918, v. 10, p. 523–541.

COUMARINUM, N. F.

Anon.: The fourth edition of the supplement to the Ph. Germ. gives the following characteristics for coumarin: Colorless, glistening, sublimable prisms, which dissolve with difficulty in cold water, more readily in boiling water, easily in alcohol and ether and in warm austic soda; melting point about 70° C.; residue on ignition not over per cent.—Semi-Ann. Rep. 1917, April, p. 83.

Umney, J. C.: A sample of coumarin found to be adulterated conained at least 30 per cent of terpin hydrate. A method for its letection is described.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 81.

de Jong, A. W. K.: A preliminary paper dealing with the action of unlight on coumarin. The product formed does not correspond with he hydrodicoumarin prepared by Fittig and Dyson.—Verslag Akad. Vetenschappen, Amsterdam, 1918, v. 26, p. 906–907, through Chem. Abstr. 1918, v. 12, p. 2549.

Wichmann, H. J.: A method is described for the detection and determination of coumarin in factitious vanilla extracts.—J. Ind. & Eng. Chem. 1918, v. 10, p. 534.

CREOSOTI CARBONAS.

Roberts, J. G.: One sample of creosote carbonate examined had a specific gravity slightly below the U. S. P. standard, but was otherwise of U. S. P. quality.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

CREOSOTUM.

Palet, Luciano P. J.: The differentiation of creosote and guaiacol by means of oxidases from the root of *Medicago sativa* is described.—Ann. soc. quim. Argentina, 1917, v. 5, p. 305–307.

Ewe, George: The phenol coefficient of creosote by the U. S. Hygienic Laboratory method is given as 3.62.—Proc. Pennsylvania Pharm. Assoc. 1918, v. 41, p. 166.

Dubell, S.: One sample of beechwood creosote examined became turbid in the U. S. P. glycerin test.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

CRESOL.

Couch, James F.: A preliminary paper describing a process for the deodorization of the cresols.—Am. J. Pharm. 1918, v. 90, p. 128–130.

Fox, J. J., and Barker, M. F.: An investigation of the solidifying and boiling points of phenol and the cresols. It is concluded that it is unsafe in practice to consider cresylic acid free from phenol simply because it yields a distillate which does not freeze when immersed in ice water.—J. Soc. Chem. Ind. 1918, v. 37, p. 268–272T.

Dawson, Harry M., and Mountford, Christopher A.: Methods for the estimation of phenol and the three isomeric cresols in mixtures of these substances are described in detail.—J. Chem. Soc. Lond. 1918, v. 113, p. 935–944.

Knight, G. W., et al.: A method is described for the estimation phenol in the presence of the 3 cresols.—J. Ind. & Eng. Chem. 1918, 10, p. 9–18.

Éwe, George: The phenol coefficient of U. S. P. cresol by the U. Hygienic Laboratory method is given as 1.5 to 3.4.—Proc. Pennsy vania Pharm. Assoc. 1918, v. 41, p. 166.

Vanderkleed, C. E., and Éwe, G. E.: In solutions of alkaloids, cres in the proportion of 0.3 per cent acts like an alkali and liberates alk loids. If insufficient water is present the liberated alkaloid com down with the precipitate. The alkaloidal solutions tested were tho of quinine, hydrochloride, dihydrochloride and sulphate, strychni sulphate, morphine hydrochloride, heroin, and codeine sulphate.- Apothecary, 1918, v. 30, No. 4, p. 34.

Elvove, Elias: A description of a colorimetric method for the est mation of cresol or phenol preservatives in serums.—Bull. Hyg. La 1917, No. 110, p. 25–34.

H. K. Mulford Co.: An examination of two lots of cresol showe that they did not correspond to the U. S. P. requirement for distill tion, but that they were satisfactory in phenol and toxicity coeff cients.—Drug. Circ. 1918, v. 62, No. 3, p. 25.

Homer, Annie: A note on the toxicity of cresylic acid.—J. Physio Proc. 1918, v. 52, p. XXXIV.

CROCUS, N. F.

Valdiguié: An account of the cultivation and collection of Kosa saffron. Data showing the moisture content, ash content, and colori power are also given. Bull. sc. pharmacol. 1918, v. 25, part 1, p. 302 305; J. pharm. et chim. 1918, v. 18, p. 183–184.

Krzizan, R.: Boric acid is a normal constituent of French saffro although it occurs in very small quantities.—Ztschr. öffentl. Chem. 19, p. 90, through Pharm. Zentralh. 1918, v. 59, p. 121.

Tunmann, O.: It is recommended that Verda's test (reaction wit sodium phosphomolybdate) for the identification of saffron be give in the new edition of the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 307.

Anon.: A review discussing the adulteration of saffron.—De Mörser, through D.-A. Apoth.-Ztg. 1918, v. 38, p. 164.

Anon.: Attention is directed to the adulteration of saffron wit *Onopordon acanthium* L. The material is colored and also impreg nated with certain nonvolatile salts. A sample of this materia yielded 36.5 per cent ash.—Pharm. Ztg. 1918, v. 63, p. 343.

CUBEBA.

Ikebe, Hideto: The genuine cubeb can be distinguished with cer tainty from the spurious fruit by its shape and by the developme of a wine color with 95 per cent sulphuric acid.—J. Pharm. Soc. Japan, 1918, No. 432, p. 100–101.

Lea, E. J.: Two samples of cubeb berries examined were not of U. S. P. quality.—Rep. California Bd. Health, 1918, p. 167.

CUPRI SULPHAS.

St. Procopiu: The diffusion coefficient of copper sulphate, measured by a new method, is given as 50 x 10^{-7}.—Ann. phys. 1918, v. 9, p. 96–112.

Hall, Maurice C., and Foster, W. D.: Data are given relative to the efficacy of some anthelmintics, including copper sulphate.—J. Agric. Res. 1918, v. 12, p. 397–447.

Dykins, W. A., and Jones, R. P.: A report of experiments to determine the toxicity of copper sulphate injected intravenously and the effect on trypanosomes.—Vet. Rec. 1917, v. 29, p. 415–416, through Chem. Abstr. 1918, v. 12, p. 68.

DeHérain: Notes on the use of copper sulphate in therapeutics.—Presse Médicale, 1918, v. 26, p. 555–557.

DAMIANA, N. F.

Ewe, G.: One lot of damiana leaves examined was rejected because it contained a considerable proportion of pebbles. Another lot consisted almost entirely of stems.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

DELPHINIUM, N. F.

Beath, O. A.: A study of the seasonal variation of acidity, toxicity, and alkaloidal content of three species of larkspur, *Delphinium geyeri*, *D. glaucescens*, and *D. subalpinum*.—J. Am. Pharm. Assoc. 1918, v. 7, p. 955–960.

DEXTRINUM ALBUM, N. F.

Morningstar, Joseph: A review of the development of the American dextrin industry.—Color Trade J. 1918, v. 2, p. 67–69.

Babington, F. W., et al.: A short, but fairly accurate, method for the examination of commercial dextrin and related starch products is described.—J. Soc. Chem. Ind. 1918, v. 37, p. 257–258T.

Lamb, M. C., and Harvey, A.: A general discussion of forms of dextrins and of methods for their examination. Results of the analysis of typical dextrins are given.—J. Soc. Dyers Colourists, 1918, v. 34, p. 10–11, through J. Soc. Chem. Ind. 1918, v. 37, p. 133.

DIASTASUM

Moriga, M.: Japanese patent No. 32116. Pure diastase is obtaine by allowing yeast to grow in wheat or rice bran, extracting the mas with water, and finally treating the aqueous extract with bariu chloride and alcohol.—Chem. Abstr. 1918, v. 12, p. 2232.

Éwe, George E.: Data showing the effect of sodium chloride an of sodium nitrate on the activity of pancreatin, diastase, and renni are given.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 173–174.

Berczeller, L., and Fodor, E.: An investigation of the action o oxidizing and reducing substances on the activity of diastase.—Biochem. Ztschr. 1917, v. 84, p. 42–49, through J. Chem. Soc. Lond 1918, v. 114, part 1, p. 132.

Bailly, O.: Theoretical considerations and attempts at the appli cation of the laws of chemical mechanics to diastatic reactions.—J. chim. phys. 1918, v. 16, p. 28–45.

LaWall, C. H.: Two samples of diastase examined possessed abou one-half the U. S. P. digestive power and contained about 50 pe cent insoluble matter, mainly starch.—Proc. Pennsylvania Pharm Assoc. 1918, p. 103.

Roberts, J. G.: One sample of diastase examined showed only little over three-fourths of the U. S. P. starch digesting power. I was not soluble in water, as is required by the U. S. P. standard, bu showed over 30 per cent of insoluble matter which, under the micro scope, was seen to be starch granules.—Proc. Pennsylvania Pharm Assoc. 1918, p. 103.

DIGITALIS.

Straub, W.: Notes on digitalis culture. The systematic investiga tion of 1-year plants showed the fallacy of collecting only the plant of the second year growth. Experiments also showed that the ster and skeletal parts of the plant unfavorably affect the quality of th drug.—Arch. Pharm. 1918, v. 256, p. 196–200.

Rusby, H. H.: Digitalis is easily cultivated in this country an much has already been done in this direction. Large quantities o the wild drug have also been collected in Oregon.—Proc. New Yor Pharm. Assoc. 1918, p. 193.

White, S. M., and Morris, R. E.: Digitalis grown in Minneso was found to be as active as that grown elsewhere. In standardizin *Digitalis lutea* it was found that it did not cause cats to vomit o produce convulsions with emptying of the bladder and bowels a with *D. purpurea.* At the same time, *D. lutea* was clinically com parable in every way with *D. purpurea.*—J. Pharmacol. & Exper Therap. 1918, v. 11, p. 184.

Hoyer, O.: The adulteration of powdered digitalis with powdered leaves of verbascum and *Inula conyza* D. C. is reported. Flores Tiliae are also mentioned as adulterants of powdered digitalis.—Ztschr. allgem. österr. Apoth.-Ver. 1917, v. 55, p. 11, through Pharm. Zentralh. 1917, v. 58, p. 320.

Rogers, C. H., and Newcomb, E. L.: A study of the inorganic constituents of digitalis, with a report of experiment on methods of cleaning.—Northwestern Drug. 1918, v. 19, No. 5, p. 30–36; Am. J. Pharm. 1918, v. 90, p. 239–252; Proc. Minnesota Pharm. Assoc. 1918, p. 130–139.

Newcomb, E. L., and Rogers, C. H.: An investigation of the relative activity of separated portions of digitalis showed that the petioles are practically worthless and that the valuable constituents are present chiefly in the lamina.—Northwestern Drug. 1918, v. 19, No. 7, p. 42–49.

Peinado, Pedro P.: A pharmaceutical study of digitalis and commercial preparations of the digitalis glucosides.—Farm. Españ. 1918, v. 50, p. 209–213.

Tschirch, A., and Wolter, F.: The present physiologic methods for the evaluation of digitalis are stated only to define the poison and not the therapeutic value. A method for the chemical evaluation of digitalis which is said to represent the true active principles is described. Other chemical methods of evaluation are reviewed.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 469–474, 495–498, 512–514.

Busquet, H.: From experiments, it is concluded that the results obtained with the physiologic test for the digitalis group of drugs as described in the U. S. P. do not vary more than 25 per cent. While this condition does not compare very favorably with a chemical test, it nevertheless is a good indication of the therapeutic value of the preparation.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 88–89.

Engelhardt, H.: It is stated that the domestic digitalis was generally found to be of very good quality. It was found that the twelve-hour frog test is more reliable than the one hour official test and that the cat test is superior to both of them.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

Rapp: An investigation of the stability of certain proprietary digitalis preparations. Data are given showing the changes in the effectiveness of digitoxin, digipuratum, digifolin, digitalysatum, digalen, and digipan over a period of two years. *Rana temporaria* are stated to be superior to *R. esculenta* for the biological test.—Pharm. Zentralh. 1917, v. 58, p. 479–481.

Krogh, M.: The isolated heart of the frog, *Ranna temporaria*, should not be used for the standardization of digitalis, since it absorbs part of the active principles, and therefore behaves differently from the heart of the edible frog, *R. esculenta.* The heart of the latter only should be used.—Ugeskrift for Laeger. Copenhagen. throug J. Am. M. Assoc. 1917, v. 68, p. 1672.

Gottlieb, R.: The "stillstand" of the frog's ventricle after the injection of active digitalis glucosides passes off after a variable time especially in summer frogs. The difference in recovery time is suggested as a basis for a means of evaluating digitalis preparations.—Arch. exper. Path. u. Pharmakol. 1918, v. 83, p. 117–156.

Grönberg, John: Data relative to the physiological and chemica evaluation of different species of digitalis grown in the Helsingfor Botanical Gardens are presented. Focke's method was employed fo the physiological examination and the method of Keller for th chemical test. Focke's method gave good results, but is thought t be too complicated to be included in the next Finnish pharmacopœia.—Finska Läkaresälskapets Handlingar, 1916, No. 1, throug Schweiz. Apoth. Ztg. 1918, v. 56, p. 269.

Krogh, M.: Krogh suggests as the unit of physiologic action th lowest concentration of a digitalis preparation which arrests for on minute or more the spontaneous rhythm of the isolated heart of th frog.—Ugeskrift for Laeger, Copenhagen, 1918, v. 80, p. 874, throug J. Am. M. Assoc. 1918, v. 71, p. 416.

Baljet, H.: An investigation of the localization of active glucoside in digitalis leaves. These were found to occur in the hairy epidermis, in the endodermis, and less constantly in the subepiderma collenchyma cells. Leaves from 12 different species of digitalis al reacted the same.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 248–251 an 262–263; Pharm. Weekblad, 1918, v. 55, p. 602–608. See also A. W van der Haar, ibid. p. 686–687.

Baljet, Henk: A study of the constitution and chemical behavio of the so-called digitalis glucosides, with a description of a new reaction for their identification. These glucosides produce a red-orang coloration in a reagent consisting of a dilute solution of sodiu hydroxide to which has been added a small amount of picric acid.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 71–74, 84–88.

Burmann, James: Data relative to the optical rotation and molecular weight of gitalin (pseudodigitoxin) are presented.—Schweiz Apoth.-Ztg. 1918, v. 56, p. 28–30.

Kiliani, H.: Digitalis substances. XXXVIII. Researches on digitonin, digitogenic acid, digitoxigenin, and digitaligenin.—Ber deutsch. chem. Gesellsch. 1918, v. 51, p. 1613–1639.

Meyer, E.: A quantitative comparison of the active glucoside of digitalis leaves of various origin and some commercial digitali galenicals, with special reference to the gitalin content of commercial digitalis preparations. The activity of the preparations wa determined by the physiological method of Straub.—Arch. exper.

Path. u. Pharmacol. 1917, v. 81, p. 261, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 368.

Santesson, C. G., and Strindberg, L.: A study of the physiological ction of digitalis substances, with special reference to gitalin. Gita-in was found to be sixty to seventy times more toxic than the dried igitalis leaves, one and one-half times as toxic as digitoxin solu-ion, and fifteen times as toxic as "Strophanthin Boeringer."—Skand. rch. Physiol. 1917, v. 35, p. 51–100, through Physiol. Abstr. 1918, . 3, p. 58.

Anderson, George A.: Three shipments of digitalin assayed physio-ogically only 85 per cent, 26 per cent, and 26 per cent. The last wo samples gave a brown instead of cherry-red color with sulphuric-itric acid.—Proc. N. W. D. A. 1918, p. 229–230.

von Weizsäcker, V.: The distribution of the heart glucosides be-ween the cell and its surroundings and the absolute amount bound vith active concentrations has been determined. Solutions of gitalin, igitalin, erythrophelin, and saponin were shown to have the poison removed by passage through the heart, and the heart was shown to ave held a considerable amount of these substances. This is not rue of g-strophanthin. The differences in the behavior of the various igitalis glucosides are not due to chemical relations, but may be xplained by the molecular condition of the solutions. Merck's igitalin may be fractionated into two parts by chloroform, the stro-hanthin type, chloroform soluble, and a water-soluble part similar o quillaja acid.—Arch. exper. Path. u. Pharmakol. 1917, v. 81, p. 47–260, through Chem. Zentralbl. 1918, v. 89, part 2, p. 386.

Impens, E.: A report of experiments on the effect of digitalis, stro-hanthin, and cymarin on the oxydase "granula" of the mammalian eart.—Ztschr. exper. Path. u. Therap. 1917, v. 19, p. 205–210.

Éwe, George E.: A fixed oil obtained from digitalis leaves was range-yellow in color, had a specific gravity of 0.9368 at 25° C., ave a saponification number of 205.8, and an iodine value of 64.5.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 163.

Straub, W.: A crystallizable glucoside, oleandrin, resembling italin in its physiological action, was isolated from oleander leaves. The latter are two and one-half times as active as digitalis leaves.—rch. exper. Path. u. Pharmakol. 1918, v. 82, p. 327–343, through Physiol. Abstr. 1918, v. 3, p. 134.

Zueblin, Ernest: An investigation of the radioscopic qualities of he cardio vascular stimulants, especially digitalis preparations.—Med. Rec. 1918, v. 93, p. 366–370.

Sajous, Louis T. de M.: A discussion of some recent observations n digitalis.—New York M. J. 1918, v. 107, p. 997–998, 1044–1045, 1092–1093, and 1153–1154; v. 108, p. 35–36, 80–81, 123–124, 168–169, nd 211–212.

Pratt, Joseph H.: A review of digitalis therapy, especially th work of Withering. The strength and quality of digitalis grown i various localities is discussed.—J. Am. M. Assoc. 1918, v. 71, p 618–622.

White, S. Marx, and Morris, R. Edwin: A study, by means o electrocardiograms, of the Eggleston method of administering digitalis. The method produces powerful effects, and should be use with extreme care.—Arch. Int. Med. 1918, v. 21, p. 740–778.

Sadler, Mark: Notes on the physiological action and therapeuti indications of digitalin.—New York M. J. 1918, v. 108, p. 607–608

Gottlieb, R.: A study of the absorption of digitalis glucosides b the tissues. The amount of the glucosides in the blood are adjudge by the biological test on the frog's heart.—Arch. exper. Path. u Pharmakol. 1917, v. 82, p. 1–29; Physiol. Abstr. 1918, v. 3, p. 134

Halsey, Robert H.: A study of the use of digitalis in the contro of auricular fibrillation and flutter, with electrocardiograms illustrating its effect.—Am. J. M. Sc. 1918, v. 155, p. 344–356.

Whiting, A. J.: A report on the treatment of a case of auricula fibrillation in which the superiority of digitalis over strophanthu was clearly demonstrated.—Proc. Roy. Soc. Med. 1918, v. 11, Therap Sec. p. 1–52.

Sajous, Louis T. de M.: A comparison of the action and effects o strophanthus and its active principles with digitalis. Definite differences in the clinical actions and indications of the two drugs ar stated to nave been observed.—New York M. J. 1918, v. 108, p. 651–652, 696–697, 870–871, 914 and 958–959.

ECHINACEA, N. F.

Sackett, C. S.: Notes on the use of echinacea in the practice o medicine.—Nat. Eclect. M. Assoc. Quart. 1918, v. 10, p. 218–219 see also William P. Best, ibid. p. 219–222; Finley Ellingwood, p 223–228.

ELIXIRIA.

Wood, Horatio, jr.: A criticism of the National Formulary wit respect to the elixirs which it contains.—J. Am. Pharm. Assoc. 1918 v. 7, p. 344.

Éwe, George: Two formulas are given for a compound aromati elixir, which is proposed as an addition to the National Formulary.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 172–173.

ELIXIR CALCII ET SODII GLYCEROPHOSPHATUM, N. F.

Mueller, Bertha: The following is suggested as a formula for th preparation of the elixir of calcium and sodium glycerophosphates

Solution of sodium glycerophosphate, 25; calcium glycerophosphate, .75; lactic acid, 10; aromatic elixir, 500; distilled water to make 000.—Nat. Druggist, 1918, v. 48, p. 486.

Utech, P. H.: Precipitation frequently occurs in the elixir of glycerophosphates of the N. F. after a few weeks' standing due to he separation of a portion of the calcium salt. This may be avoided y increasing the quantity of phosphoric acid from 8 cubic cen-imeters to 10 cubic centimeters.—Apothecary, 1918, v. 30, No. 8, . 24.

ELIXIR GENTIANÆ GLYCERINATUM, N. F.

Mueller, Bertha: The following formula for the glycerinated elixir f gentian is recommended: Fluidextract of gentian, 10; fluidextract f taraxacum, 15; acetic ether, 0.5; phosphoric acid, 5; compound incture of cardamom, 60; tincture of sweet orange peel, 15; sugar, 00; sherry wine to make 1000.—Nat. Druggist, 1918, v. 48, p. 486.

ELIXIR PEPSINI ET RENNINI COMPOSITUM, N. F.

Mueller, Bertha: The following formula is suggested for the ompound elixir of rennin and pepsin: Pepsin, 22.5; rennin, 16.5; actic acid, 2; tincture of sweet orange peel, 15; sirup, 150; alcohol, 200; oil of myristica, 0.1; distilled water to make 1000.—Nat. Druggist, 1918, v. 48, p. 486.

ELIXIR TERPINI HYDRATIS, N. F.

Mueller, Bertha: The following formula is suggested for elixir f terpin hydrate: Terpin hydrate, 17.5; alcohol, 425; sirup, 400; glycerin, 100; tincture of sweet orange peel, 20; distilled water to make 1000.—Nat. Druggist, 1918, v. 48, p. 486.

EMETINÆ HYDROCHLORIDUM.

Dott, D. B.: Amorphous emetine hydrochloride dissolved in 7 parts of water soon precipitates and 7 parts more of water are required to complete solution.—Pharm. J. 1917, v. 99, p. 282.

Guglialmelli, J., et al.: A study of the toxicity of emetine hydrochloride. The fatal dose of the hydrochloride for man is given as 0.6 gm. It is recommended that not more than 4 consecutive daily njections of 0.15 gm., or 6 to 7 of 0.1 gm., be given and that long intervals be allowed to elapse between series.—Revista Instit. Bacteriol. Buenos Aires, 1918, v. 1, p. 161–172, through Physiol. Abstr. 1918, v. 3, p. 336.

Lake, Gleason C.: An investigation of the toxicity of emetine hydrochloride, with special reference to the comparative toxicity of various market preparations.—Bull. Hyg. Lab. 1918, No. 113.

Schlomovitz, Benjamin H.: A study of the action of emetine o the white blood corpuscles. Emetine probably acts as a leucotoxin.– J. Nat. Dental Assoc. 1918, v. 5, p. 588–590.

Mattei, Ch.: A study of reagents, general and special, for th determination of emetine in human urine. Data showing the sensitiveness of the various reagents studied are presented.—Compt rend. soc. biol. 1918, v. 81, p. 315–317.

Walters, A. L., et al.: A report on an investigation of the protozoocidal and bactericidal action of emetine, cephæline, and derivatives.—J. Pharmacol. 1917, v. 10, p. 341–364.

De la Paz, Daniel, and Montenegro, R.: Experiments on dog showed that in no case did the irritating action of emetine exten to the kidneys, although the drug was given for a period of tim sufficient to kill the animals.—Philippine J. Sci. 1917, v. 12B, p. 256

Anderson, George A.: One sample of emetine hydrochloride examined was dark in color and possessed a strong odor.—Proc. N. W D. A. 1918, p. 239.

Lambert: A report of satisfactory results obtained with the us of emetine bismuth iodide, alone, or with emetine hydrochloride ir a series of cases of amœbic dysentery.—Brit. M. J. 1918, v. 1, p 116–118.

Rabak, W.: A report of a chemical examination of commercia specimens of emetine bismuth iodide. Analytical data are presented.—Rep. Lab. Am. M. Assoc. 1918, v. 11, p. 66–73.

Lewisohn, Richard: A record of results obtained in the use o emetine in the treatment of malignant tumors.—J. Am. M. Assoc 1918, v. 70, p. 9–10.

EMPLASTRA.

Schmatolla, O.: A brief examination of the causes of deterioratio in caoutchouc plasters, with suggestions for means of effecting thei restoration.—Pharm. Ztg. 1918, v. 63, p. 583.

Dieterich, K.: Adhesive and caoutchouc plasters can be regenerate by exposing them to the vapors of a mixture of benzine, ether and benzene, or a mixture of any two of these solvents for a period of one or two days. An abstract.—Pharm. Weekblad, 1918, v. 55, p. 311.

EMPLASTRUM BELLADONNÆ.

Dohme, A. R. L.: The American Drug Manufacturers' Association has recommended an alkaloidal content of 0.25 per cent as a standard for belladonna plaster instead of 0.35 to 0.40 per cent, as required by the U. S. P. IX. They also recommend the U. S. P. VIII method of assay as being preferable to that given in the U. S. P. IX.—Proc. Am. Drug Mfg. Assoc. 1918, p. 222.

Anon.: One sample of belladonna plaster examined was not up to the U. S. P. standard for alkaloids.—Bull. Vermont Bd. Health, 1918, v. 19, No. 1.

EMPLASTRUM CANTHARIDIS.

Anon.: Notes on the preparation of cantharides plaster.—N. A. R. D. J. 1918, v. 25, p. 571.

Tunmann, O.: It is recommended that a sublimation test for cantharidin be included in the new edition of the Ph. Germ. under cantharides plaster.—Apoth.-Ztg. 1918, v. 33, p. 307.

EMULSA, N. F.

Davey, W. P.: A report of experiments in the emulsification of oils by merely heating them with an alkaline aqueous solution in an inclosed space.—Phys. Rev. 1918, v. 11, p. 138–139, through Chem. Abstr. 1918, v. 12, p. 1719.

Traub, J. P.: A report of researches to determine the mechanism of saponification in emulsions.—J. chim. phys. 1918, v. 16, p. 107–174.

Schlaepfer, A. U. M.: Water in oil emulsions. Pickering's conclusions are confirmed, namely, that if solid particles of the emulsifier have a lower surface tension with the phase A than with the phase B, an emulsion will be formed with A as medium and B as disperse phase.—J. Chem. Soc. Lond. 1918, v. 113, p. 522–526.

Shorter, S. A.: The capillary layer as the seat of chemical reactions. Data relative to the stability of emulsions toward dilution are given.—J. Soc. Dyers Colourists, 1918, v. 34, p. 136–138, through Chem. Abstr. 1918, v. 12, p. 2265.

Anon.: An emulsion of sesame oil suitable for use in the treatment of diabetes is prepared by using 6 cubic centimeters of solution of sodium hydroxide for every 600 cubic centimeters of oil and 300 cubic centimeters of water.—Drug. Circ. 1918, v. 62, p. 388.

Anon.: A true emulsion of cocoanut oil is prepared by the use of liniment of soft soap and potassium carbonate as emulsifying agents.—Pract. Drug. 1918, v. 36, No. 11, p. 63.

EMULSUM OLEI MORRHUÆ.

Anon.: The use of 15 grams of acacia and 7 grams of tragacanth eliminates all possibility of failure to form an emulsion. It is suggested that these quantities be specified in the new edition of the Ph. Germ.—Pharm. Zentralh. 1918, v. 59, p. 208.

EMULSUM PETROLATI, N. F.

Ewe, George: A 0.5 per cent agar solution or a 1 per cent solution of Irish moss are stated to be suitable agents for preparing emulsions of liquid petrolatum.—Proc. Pennsylvania Pharm. Assoc. 1918 v. 41, p. 174.

Pickering, S. U.: A report of experiments in emulsifying liquid petrolatum with gasoline and benzine, using sodium stearate, potassium oleate and palmitate, and soft soap as emulsifying agents.—Chem. & Drug. 1918, v. 90, p. 557.

ERGOTA.

Tunmann, O.: Notes on ergot gathered in Switzerland, with special reference to its alkaloid and oil content.—Apoth.-Ztg. 1917, v. 32, p. 550, through Pharm. Zentralh. 1918, v. 59, p. 340–341.

Cæsar and Loretz: The appearance of the fractured surface of ergot is not always an indication of its value. The new German pharmacopœia should make use of the cornutin reaction for this purpose.—Pharm. Zentralh. 1918, v. 59, p. 28.

Wolter, L.: Experimental notes on the detection of ergotinine. Modifications of the Tanret reaction are discussed and a new modification involving the use of hydrogen peroxide is described.—Chem. Ztg. 1918, v. 42, p. 446, through J. Soc. Chem. Ind. 1918, v. 37, p. 671A.

Soc. Anon. pour L'Ind. à Bâle: Swiss patent No. 77,167 describes a process for making an ergot preparation suitable for intravenous medication.—Chem. Abstr. 1918, v. 12, p. 2110.

Hewlett, Albion W.: An experimental study of the action of tyramin on the circulation of man.—Arch. Int. Med. 1918, v. 21, p. 411–427.

ERIODICTYON.

Oesterle, O. A.: Chrysoeriol, $C_{16}H_{12}O_6$, isolated by Power, Tutin, and Clewer from yerba santa is found to be identical with 1, 3, 4′-trihydroxy-3′-methoxyflaxone.—Arch. Pharm. 1918, v. 256, p. 119–122.

EUCALYPTOL.

Anon.: The fourth edition of the supplement to the Ph. Germ. gives the following characteristics for eucalyptol: Colorless liquid; boiling point, 176–177° C.; congealation point, about 0° C.; specific gravity, 15° C., 0.928 to 0.930; optical rotation, +0°; slightly soluble in water, mixes with alcohol, ether and chloroform and fatty oils; forms a perfectly transparent mixture with an equal volume of liquid paraffin.—Semi-Ann. Rep. 1917, April, p. 84.

Earle, J. C.: Notes on cineol, its solubility in water and its detection by the iodol method.—J. Soc. Chem. Ind. 1918, v. 37, p. 274T.

Krauss, Robert B.: An outline is given of a method for chlorinatng eucalyptol to a density of 1.2.—J. Am. Pharm. Assoc. 1918, v. 7,). 46–49.

Anon.: The following formula is suggested for the preparation of ucalyptol emulsion: Menthol, 12 grains; eucalyptol, 2 fluidounces; cacia, 1 ounce; honey, 3 fluidounces; peppermint water, 6 fluidunces; and syrup to make 16 fluidounces.—Am. Druggist, 1918, v. 6, p. 469.

EUGENOL.

Anon.: The fourth edition of the supplement to the Ph. Germ. gives the following characteristics for eugenol: Light yellow, becoming brown on exposure to the air; specific gravity at 15° C., .071 to 1.074; optical rotation, +0°; soluble in 2 parts of dilute lcohol; 1 gram of eugenol gives a clear solution with 26 cubic centimeters of water and 4 cubic centimeters of caustic soda, becoming lightly turbid on exposure to the air.—Semi-Ann. Rep. 1917, April, p. 84.

EUONYMUS, N. F.

Youngken, Heber W.: Notes on the adulteration of euonymus with wafer ash bark. Illustrations showing the important differences in the structure of these two drugs are given.—Am. J. Pharm. 1918, v. 90, p. 160–165.

Holmes, E. M.: A commercial sample of euonymus bark examined consisted of one part of true bark and seven parts of araliaceous or rutaceous bark. The lack of uniform activity of the drug in recent years is attributed to this admixture. Sketches of these barks showing their macroscopic differences are given.—Pharm. J. 1918, v. 100, p. 88–89.

Guérin, P.: The adulteration of euonymus bark with the bark of *Ptelea trifoliata* L. is reported.—L'Union Pharm. v. 59, p. 113 through Pharm. J. 1918, v. 101, p. 107.

Westman, L. E., and Rowat, R. M.: The manganese content of euonymous, computed on a dry basis at 110° C., is given as 0.0021 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

EUPATORIUM, N. F.

Editorial: Botanical and medicinal data relative to boneset are given.—Eclectic M. J. 1918, v. 78, p. 97–98.

EXTRACTA.

Utech, P. H.: When dispensing powdered extracts, the powder frequently agglutinates around the lip of the bottle due to the humidity of the atmosphere. This may be overcome by removing th required amounts of powder from the bottle with the aid of a spatula.—Apothecary, 1918, v. 30, No. 8, p. 24.

Orient, J.: Notes on the determination of nitrates in extracts a a means for their identification. This test serves especially for th identification of extracts prepared from the solonaceous plants, a they contain considerable quantities of nitrates.—Pharm. Post, 1917 v. 50, p. 237.

EXTRACTUM CARNIS, N. F.

Geret, Ludwig: From investigations, it is concluded that th succinic acid content is no index to the deteriorated condition of meat extract and that the chlorine content has no significance with respect to quality.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 35, p. 412–416

EXTRACTUM GLYCYRRHIZÆ.

Prichard, Germaine: An investigation of methods for the preparation of licorice extract. The best method of extracting is stated to be that of the U. S. P. This method yielded 8 per cent of glycyrrhizic acid as against 4 to 5 per cent when extraction was effected with water alone.—J. pharm. et chim. 1918, v. 17, p. 16–18.

EXTRACTUM NUCIS VOMICÆ.

Lefeldt, M.: The Ph. Germ. method for preparing the extract of nux vomica is criticized because of the large amount of fat which is extracted and which interferes with drying. To overcome this bad feature, it is proposed that the powdered nux vomica be extracted with benzene previous to percolation with the alcoholic menstruum.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 167.

EXTRACTUM OPII.

Söderberg, Gustav: A micro method for the determination of morphine in extract of opium is described.—Pharm. Post, 1918, v. 51, p. 385, through Chem. Zentralbl. 1918, v. 89, part 2, p. 316–317.

FEL BOVIS.

Salkowski, E.: The precipitate which separates from ox gall on long standing was identified as calcium palmitate.—Ztschr. physiol. Chem. 1916, v. 97, p. 210–213, through Zentralbl. Biochem. u. Biophys. 1917, v. 19, p. 124.

FERRI CITRAS.

Anderson, George A.: One shipment of iron citrate examined was a partly gelatinous mass.—Proc. N. W. D. A. 1918, p. 230.

FERRI HYDROXIDUM CUM MAGNESII OXIDO.

Boswell, M. C. and Dixon, J. V.: An investigation of the adsorption of arsenious acid by ferric hydroxide. The adsorption of arsenious acid was found to be diminished by the presence of NaOH.—J. Am. Chem. Soc. 1918, v. 40, p. 1793–1801.

FERRI LACTAS, N. F.

Mossler, G.: A volumetric method for the determination of iron in iron lactate is described.—Pharm. Post, 1918, v. 51, p. 346, through Pharm. Zentralh. 1918, v. 59, p. 302.

FERRI PHOSPHAS.

Haines, O. S.: A discusion of the physiological action of ferric phosphate.—Hahnemann. Month. 1917, v. 52, p. 683–685.

FERRI SULPHAS.

Sommer, W. H.: U. S. patent No. 1,256,068 describes the crystallization of ferrous sulphate from a pickling bath.—Chem. Abstr. 1918, v. 12, p. 982.

Mach, F. and Lederle, P.: Experimental data are given to show that titanium trichloride can be used in place of potassium permanganate in the estimation of ferrous sulphate.—Landw, Vers. Sta. 1917, v. 90, p. 191–224, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 580–581.

FERRUM.

Anon.: British chemical standards for iron and steel are presented.—Engineering, 1918, v. 105, p. 374–375, through Chem. Abstr. 1918, v. 12, p. 1757.

Brooke, W. J. and Hunting, F. F.: A paper dealing with the micro structure of pure iron.—Engineering, 1917, v. 104, p. 532–534, through Chem. Abstr. 1918, v. 12, p. 129. See also H. C. H. Carpenter, Nature, 1917, v. 100, p. 134–135.

Hull, A. W.: Data obtained in an X-ray study of the crystalline structure of iron are presented.—Phys. Rev. 1917, v. 9, p. 84–87.

Czako, Nikolaus: Notes on the alkalimetric estimation of phosphorus in iron and steel.—Chem. Ztg. 1918, v. 42, p. 53–54, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 173.

Anon.: Experiments with the bismuthate method for the determination of manganese in iron are reported.—Rev. metal, 1918, v. 15, part 2, p. 169–172, through Chem. Abstr. 1918, v. 12, p. 1953.

Brandt, L.: A note on the use of titanium chloride as the reducing substance in the determination of iron by the permanganate method.—Chem. Ztg. 1918, v. 42, p. 450.

Foa, M.: The volumetric determination of carbon in iron without special apparatus is described.—Ind. chim. min. met. 1917, v. 4, p. 161-162, through Chem. Abstr. 1918, v. 12, p. 342.

Mauland, T.: Soft gray iron is reported as having a high sulphur content.—Met. Chem. Eng. 1917, v. 17, p. 383.

Pinsl, H.: Sulphur in iron is determined by absorbing the H_2S evolved, when the iron is treated with hydrochloric acid, in 5 per cent sodium hydroxide solution.—Chem. Ztg. 1918, v. 42, p. 369-371, through J. Soc. Chem. Ind. 1918, v. 37, p. 422A.

Schmitz, F.: A method for the determination of oxygen in iron is described.—Stahl u. Eisen, 1918, v. 38, p. 541-542, through J. Soc. Chem. Ind. 1918, v. 37, p. 469A.

Beijerinck, M. W.: A new biological reaction for iron depends on the fact that *Saccharomyces pulcherrimus* secretes a colorless chromogen which becomes a deep red pigment in the presence of oxygen and an iron salt.—Physiol. Abstr. 1918, v. 3, p. 482.

Dovey, E. R.: A note describing an improvement in the colorimetric estimation of iron.—Analyst, 1918, v. 43, p. 31-32.

Moszler, Gustav: Notes on new analytical methods for the next edition of the Ph. Germ. Methods for the determination of iron in the official iron preparations are described.—Pharm. Post, 1918, v. 51, p. 345-346 and 361-363, through Chem. Zentralbl. 1918, v. 89, part 2, p. 392-393.

FERRUM REDUCTUM.

Deutsche Pharmaceutische Gesellschaft: It is recommended that tests for the determination of metallic iron, as well as total iron, in reduced iron be given in the new edition of the Ph. Germ.—Ber. deutsch. pharm. Gesellsch, 1918, v. 28, p. 376.

Eberhard, August: A description of a method for the estimation of metallic iron in reduced iron. Owing to the use of impure hydrogen and high temperatures in the preparation of this product, the quality and purity has been altered to such an extent that old methods of estimating the iron, particularly the iodometric methods, no longer yield trustworthy results.—Arch. Pharm. 1917, v. 255, p. 357-381, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 48.

Winkler: Iron in reduced iron can be determined by simply heating the sample in the air and noting the increase in weight due to the combination with oxygen.—Pharm. Ztg. 1917, v. 62, p. 248, through Schweiz. Apoth.-Ztg. 1918, v. 56, p. 144.

Lucker: The Ph. Germ. method for the detection of copper in reduced iron is criticized on the ground that it is not sensitive enough. A more sensitive method is described.—Apoth.-Ztg., through Drug. Circ. 1918, v. 62, p. 220.

Engelhardt, H.: Some shipments of reduced iron examined conained an excess of sulphides. They contained about 95 per cent of educed iron when determined by the U. S. P. process.—Proc. Maryand Pharm. Assoc. 1918, p. 81.

Suto, N.: Practically all of the reduced iron examined contained ulphides in excess of the U. S. P. allowance, and some of the lots ontained shining particles of iron, suggesting the probability that rdinary powdered iron was present.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

Anderson, George A.: One shipment of reduced iron exhibited a netallic luster and contained an excess of sulphides.—Proc. N. W. D. A. 1918, p. 230.

FLUIDEXTRACTA.

Beard, J. G.: A modified process for making fluidextracts is decribed. An apparatus for carrying out percolation under reduced ressure is used.—J. Am. Pharm. Assoc. 1918, v. 7, p. 964.

Deutsche Pharmaceutische Gesellschaft: It is recommended that he new edition of the Ph. Germ. include methods for the identificaion of the fluidextracts. If this can not be done in all cases, standrds should at least be given for specific gravity, dry residue, and sh.—Ber. deutsche. pharm. Gesellsch. 1918, v. 28, p. 201–202.

Eschbaum, Friedrich: A new method for determining the amount f extractive matter in tinctures and fluidextracts consists in droping a known amount of the material on blotting paper, drying in n oven to remove the solvent, and weighing the remainder.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 417–419.

Harer, C. R.: The following method is proposed for the estimation f alcohol in fluidextracts: To 50 cubic centimeters of the fluidextract dd 15 cubic centimeters of lead acetate solution, and water to make 00 cubic centimeters, shake, remove 50 cubic centimeters by filtraion, add an excess of sodium bicarbonate, followed by a small quanity of tannic acid, and determine the alcohol by the usual method.—J. Am. Pharm. Assoc. 1918, v. 7, p. 594–597.

FLUIDEXTRACTUM CASCARÆ SAGRADÆ.

Tunmann, O.: It is recommended that the fluidextract of cascara agrada be deleted from the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 307.

Westman, L. E., and Rowat, R. M.: Methods for the chemical exmination of fluidextract of cascara and aromatic extract of cascara re described. Special attention is directed to the value of the manganese number in the examination of these preparations.—J. Am. Pharm. Assoc. 1918, v. 7, p. 759–770.

Lea, E. J.: Two samples of fluidextract of cascara sagrada examined were reported rejected.—Rep. California Bd. Health, 1918, p. 167.

FLUIDEXTRACTUM CASCARÆ SAGRADÆ AROMATICUM.

Mueller, Bertha: Glycerin is considered to be a useless ingredient of aromatic fluidextract of cascara sagrada.—Nat. Druggist, 1918, v 48, p. 487.

Todd, A. R.: The only sample of aromatic fluidextract of cascara examined was of standard quality.—Rep. Michigan D. & F. Com 1918, p. 87.

FLUIDEXTRACTUM HYDRASTIS.

Lefeldt, M.: The method of the Ph. Germ. for the determination of hydrastine in the fluidextract of hydrastis is stated to be unsatisfactory. The method of Rusting-Smeets, as modified by van der Haar, is recommended for this purpose.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 166–167.

FLUIDEXTRACTUM SCILLÆ.

Grantham, R. I., and Colson, H. C.: The most satisfactory menstruum for extracting squill was found to be 80 per cent alcohol. The twelve-hour frog method for the physiological evaluation of fluidextract of squill is stated to be more satisfactory and accurate than the one-hour frog method of the U. S. P.—J. Am. Pharm. Assoc. 1918, v. 7, p. 940.

FLUIDEXTRACTUM SPIGELIÆ.

Anon.: A note on the preparation of fluidextract of spigelia.—N. A. R. D. J. 1918, v. 25, p. 769.

FŒNICULUM.

Blin, Henri: Notes on the cultivation and commerce in fennel. An abstract.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 275–276.

Anon.: The Bureau of Chemistry reports the adulteration of fennel with the seed of bitter fennel, *Foeniculum piperitum.*—Pract. Drug. 1918, v. 36, p. 38.

FRANGULA.

Westman, L. E., and Rowat, R. M.: The manganese content of rhamnus frangula, computed on a dry basis at 110° C., is given as 0.0242–0.0674 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

GALEGA, N. F.

Hoffstein, B.: Two lots of galega examined were rejected because f the large proportion of stems which they contained.—Proc. Pennylvania Pharm. Assoc. 1918, p. 103.

GALLA.

Fagan, Margaret M.: A summary of an extensive study of the iterature dealing with the uses of insect galls. A list of 53 galls, ith their common and scientific names, is given.—Am. Nat. 1918, . 42, p. 155–173.

Zellner, Julius: A chemical study of plant galls. Analytical data howing the composition of a number of different plant galls are resented.—Ztschr. physiol. Chem. 1918, v. 101, p. 255–261, through hem. Zentralbl. 1918, v. 89, part 2, p. 284.

GAMBIR.

Hoyer, O.: The adulteration of powdered catechu with powdered ar residues is reported.—Ztschr. allgem. österr. Apoth.-Ver. 1916, . 54, p. 323, through Pharm. Zentralh. 1917, v. 58, p. 320.

Éwe, G.: Some lots of gambir examined were in a soft condition ue to excessive moisture. The U. S. P. requires gambir to be dried o the friable stage.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

Anderson, George A.: Of several lots of gum gambir examined, lots contained a large excess of moisture and possessed a very bad dor.—Proc. N. W. D. A. 1918, p. 239.

GELATINUM.

Plöcker, Ph.: A colorimetric method for the detection and deterination of copper in gelatin is described. Ammonia is the reagent sed for the production of the color.—Chem. Ztg. 1917, v. 41, p. 800, hrough Chem. Zentralbl. 1918, v. 89, part 1, p. 140.

Clark, A. W., and DuBois, Louis: A test is described which perits of expressing the jelly-forming characteristics of gelatin in ercentage figures.—J. Ind & Eng. Chem. 1918, v. 10, p. 707–709.

Bennett, Hugh G.: A theoretical discussion of the mechanism of he swelling of gelatin.—J. Soc. Leather Trades Chem. 1918, v. 2, . 40–51. See also H. R. Proctor, ibid. p. 73–76, through Chem. bstr., 1918, v. 12, p. 2458–2459.

Sheppard, S. E., and Elliott, F. A.: Data relative to the reticulaion of gelatin under different conditions are presented.—J. Ind. . Eng. Chem. 1918, v. 10, p. 727–732.

Noyes, H. A.: Glass wool is recommended for the filtration of gelatin and agar agar.—Chem. Analyst, 1918, v. 25, p. 12.

Starin, William A.: A report of a study of the anaphylactic precipitin, complement binding, and meio-stagmin reactions of gelatin.—J. Infect. Dis. 1918, v. 23, p. 139–158.

Ono, J.: The hemostatic action of gelatin is stated to be due to the sticking together of the corpuscles and not to any action on the walls of the blood vessels. An abstract.—J. Am. M. Assoc. 1918, v. 71, p. 502.

LaWall, C. H.: Of 10 samples of powdered gelatin examined, 5 contained excessive amounts of sulphur dioxide, and arsenic to the extent of over 2.5 parts to the million, also in excess.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

Engelhardt, H.: Three shipments of gelatin examined were rejected on account of the presence of an undue amount of arsenic.—Proc. Maryland Pharm. Assoc. 1918, p. 81.

GENTIANA.

Hoyer, O., and Wasicky, R.: A comparison of the therapeutic value of *Gentiana lutea* and *Gentiana asclepiada*. *Gentiana asclepiada* contains only one-half as much gentiopicrin as *G. lutea.* Organoleptic tests also showed that the latter is twice as bitter as the former.—Pharm. Post, 1918, v. 51, p. 145–146; Chem. Zentralbl. 1918, v. 89, part 1, p. 941.

Guyot, H.: Notes on the geographical distribution of *Gentiana lutea* L., the chemical composition of the root, and the enzymes which it contains.—Bull. soc. botan. Geneva, 1916, v. 8, p. 283–318, through Physiol. Abstr. 1917, v. 2, p. 286.

Molisch, Hans: Two new crystalline organic substances obtained from *Gentiana germanica* are described. The name "gentiolutein" is given to one of the substances. It sublimes, forming yellow needle soluble in acetone. Neither of the substances are identical with gentiopicrin or gentianin.—Ber. bot. Gesellsch. 1917, v. 35, p. 653 through Chem. Abstr. 1918, v. 12, p. 2344.

Tunmann, O.: A sample of powdered gentian examined consisted entirely of the broken needles of *Picea excelsa.*—Apoth. Ztg. 1917 v. 32, p. 181, through Pharm. Zentralh. 1918, v. 59, p. 269.

Kofler, L.: The examination of a sample of powdered gentia showed it to consist of about 49 per cent of powdered gentian, 4 per cent of powdered olive pits, 2 per cent of powdered wormwood and 4.27 per cent of tartar emetic.—Arch. Pharm. 1918, v. 256, p 249–252.

GERANIUM, N. F.

Wasicky, R.: The tannin content of geranium, determined by th agglutination of red blood corpuscles, was found to be 35 per cent.—

harm. Post, 1917, v. 50, p. 785–787, through Chem. Zentralbl. 1918, . 1, p. 243–244.

Asahina, Y., and Tomimura, K.: Data obtained in the analysis of *eranium nepalense*, used in Japan as a remedy for dysentery, are resented. Among the more important substances isolated are gallic cid, quercetin, and succinic acid. An abstract.—J. pharm. et chim. 918, v. 18, p. 374–375.

GLUCOSUM.

Marsden, M. W.: U. S. Patent No. 1,265,694 describes the manu-acture of glucose from bagasse.—Chem. Abstr. 1918, v. 12, p. 1709.

Willstätter, R., and Schudel, G.: Glucose can be accurately deter-ined by means of a hypoiodite solution, if certain precautions are bserved. The details of the method are given.—Ber. deutsch. chem. esellsch. 1918, v. 51, p. 780–781.

GLYCERINUM.

Bertolo, P.: A report of experiments conducted for the purpose f purifying commercial glycerin to meet the requirements of the talian Government.—Ann. chim. applicata. 1918, v. 12, p. 24–27.

Sabatier, P., and Gaudion, G.: Data relative to the decomposition f glycerol in the presence of different catalysts are given.—Compt. end. acad. sc. 1918, v. 166, p. 1033–1039; J. Soc. Chem. Ind. 1918, . 37, p. 485A–486A.

Kolthoff, I. M.: A description of a method of estimating the per-entage of water in glycerin by observing the temperature range of omplete miscibility of the sample with aniline. A table showing he corresponding percentages of water is given.—Pharm. Week-lad, 1918, v. 55, p. 304–307.

Löffl, K.: Brief descriptions of the physical methods, oxidation nethods, esterification methods, and various other methods for the letermination of glycerin, such as those in which the glycerol is veighed as glyceryl nitrate or sodium glycerate, are given.—Ztschr. ngew. Chem. 1917, v. 30, part 1, p. 197–200, through J. Chem. Soc. 918, v. 113, part 2, p. 547.

Anon.: Ten different methods for the detection of glycerin in iquids or mixtures are described and discussed.—Boll. chim.-farm. 918, v. 57, p. 98–100.

Weiss, F. L.: The determination of glycerol by the copper method. he belief that 2 molecules of glycerol combine with one atom of opper to form a chemical compound does not agree with facts. he copper content varies from 0.30 to 1.82 atoms per 2 molecules of lycerol.—Chem. Weekblad, 1918, v. 15, p. 862–868.

Beckers, J. H. M., and Kolthoff, I. M.: Notes on Wagenaar's method for estimating glycerol. The presence of ethyl alcohol, haloids, nitrates, and, to a lesser degree, sulphates, is stated to interfere.—Pharm. Weekblad, 1918, v. 55, p. 272–281.

Neumann, R.: Estimation of glycerol by the iodide method, using small quantities of hydriodic acid, yields trustworthy results only when about one-tenth of the usual quantities of sample and reagent are employed.—Ztschr. angew. Chem. 1917, v. 30, p. 234–237, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 21–22.

Kahn, Joseph: A review of methods for the qualitative and quantitative determination of glycerin. The procedures considered are the specific gravity method, the oxidation method, and the lime method for the determination of glycerin in pharmaceutical preparations.—Am. Druggist, 1918, v. 66, No. 9, p. 26–28; Proc. New York Pharm. Assoc. 1918, p. 265–270.

Cocks, L. V., and Salway, A. H.: An investigation of the factors influencing the quality of crude glycerin from whale oil when manufactured by the Twitchell process.—J. Soc. Chem. Ind. 1918, v. 37, p. 126T–128T. See also Salway, ibid. p. 123T–126T.

Hankey, Wm. T.: The specific gravities observed for glycerin varied from 1.2471 to 1.2504; the acid value varied from 0.0 to 0.024.—Proc. Ohio Pharm. Assoc. 1918, p. 130.

Harms, Herman: Of 48 samples of glycerin examined, none was found to be adulterated.—Rep. Utah D. & F. Com. 1918, p. 71.

Pannwitz, P., and Beythien, A.: Perkaglycerin, a substitute for glycerin, is stated to be a 65 to 68 per cent solution of potassium lactate in water.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 35, p. 385–387.

GLYCYRRHIZA.

Lea, E. J.: Examination of material imported as licorice root has disclosed that the product was not obtained from either of the species official in the United States Pharmacopœia, namely, Spanish licorice (*Glycyrrhiza glabra typica* Regel et Herder) or Russian licorice (*Glycyrrhiza glabra glandulifera* Regel et Herder) but consisted of Asiatic (Chuntschir) licorice (*Glycyrrhiza uralensis* Fischer), an unofficial species. The sample, except that it contained a considerable amount of stems, was of a good quality.—Bull. California Bd. Health, 1918, p. 564.

Astruc, A., and Pichard, G.: A gravimetric method for the determination of glycyrrhizin is described. The glycyrrhizin is dissolved with the aid of ammonia water, precipitated with sulphuric acid and purified by redissolving in water containing a trace of ammonia. It is finally obtained in a condition suitable for weighing by evaporation.—J. pharm. et chim. 1918, v. 18, p. 289–290.

Anderson, George A.: Japanese or Manchurian licorice root has een substituted for the U. S. P. drug. This licorice is very clean, ut differs greatly in both color and structure from the official oot.—Proc. N. W. D. A. 1918, p. 235.

Anon.: A note states that licorice root is found in various parts f the Province of Cape Good Hope and that it is being exported to ome extent.—Pharm. Era, 1918, v. 51, p. 94.

Westman, L. E., and Rowat, R. M.: The manganese content of corice root, computed on a dry basis at 110° C., is given as 0.0026 er cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

Zimmermann, Walther: The maximum water content of Succus iquiritiæ was found to be 17 per cent and the maximum ash con-nt 11 per cent. The water-soluble portion should not be more an 25 per cent, and should not contain less than 10 per cent of lycerin. Analytical data obtained in the examination of six com-ercial samples are given.—Apoth.-Ztg. 1918, v. 33, p. 319–320, 23–324, through Chem. Zentralbl. 1918, v. 89, part 2, p. 563.

GOSSYPII CORTEX, N. F.

Viehoever, A. et al.: A report of a chemical examination of *Gos-ypium hirsutum*. The latter contains quericitrin and isoquericitrin, ut no gossypitrin or gossypetin. The essential oil also differs from at obtained from the bark of *G. herbaceum*.—J. Agric. Res. 1918, . 13, p. 345.

GOSSYPIUM PURIFICATUM.

Matthews, J. M.: A discussion of the bleaching of cotton with ypochlorites, permaganates, peroxides, and perborates.—Color rade J. 1918, v. 2, p. 53–58.

Dean, W. S., and Taylor, E.: Spinning tests for determining the elative intrinsic values of different commercial grades of cotton re described.—U. S. Dept. Agric. 1917. Bull. 51, p. 1–27.

Anon.: A book notice calls attention to a volume by E. Goulding, ntitled *Cotton and Other Vegetable Fibers*.—Chem. Abstr. 1918, v. 2, p. 533.

Silhol, J.: A note on the value of kapok as a substitute for cotton the preparation of surgical dressings.—Compt. rend. acad. sci. 918, v. 166, p. 52.

GRANATUM.

Tunmann, O.: It is recommended that in the new Ph. Germ. the eactions of pomegranate with ferric chloride solution and with me water be given under microscopic tests.—Apoth.-Ztg. 1918, v. 3, p. 307.

Hess, Kurt, and Eichel, Annaliese: Studies on the constitution of the alkaloids of pomegranate. III. Researches on the constitution of pelletierine. IV. A scheme for the isolation of the pure pelletieriene alkaloids. V. The resolution of pelletierine and methylisopelletierine into their optical antipodes.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1192–1199 and 1386–1407; 1918, v. 51, p. 741–747, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 33–35 and 404.

GUAIACOL.

Palet, Luciano P. J.: The differentiation of guaiacol and creosote by means of oxidases from the root of *Medicago sativa* is described.—Ann. soc. quim. Argentina, 1917, v. 5, p. 305–307.

Mencière, Louis: Notes on the physiological properties and medico-chirurgical applications of guaiacol and benzoic acid.—Compt. rend. acad. sc. 1917, v. 165, p. 1023–1026.

GUAIACOLIS CARBONAS.

Maue, G.: To identify guaiacol carbonate, dissolve 0.02 gram of the latter in 1 cubic centimeter of alcohol, add 2 drops of ferric chloride solution and 1 drop of formaldehyde solution. If 2 cubic centimeters of sulphuric acid are then run in so as to form a layer under the mixture, a cherry-red ring will develop at the junction of the two liquids if guaiacol is present.—Pharm. Ztg. 1918, v. 63, p. 255–256, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 336.

GUAIACUM.

Schroeter, G., et. al.: A report of chemical studies on the constitution of the constituents of guaiac resin.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 1587–1613.

GUARANA.

Tschirch, A.: An illustrated description of the structure of the husks of the seeds of *Paullinia cupana* Kunth.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 445–446.

GUTTA-PERCHA, N. F.

Dekker, P.: A method for the estimation of resins and impurities in gutta-percha, based on the use of selective solvents, is described.—Ztschr. angew. Chem. 1917, v. 31, part 2, p. 46, through J. Soc. Chem. Ind. 1918, v. 37, p. 341A.

Anon.: The gutta-percha produced in Nigeria is stated to be the latex from the tree producing Shea butter.—J. Ind. & Eng. Chem. 1918, v. 10, p. 76.

HELONIAS, N. F.

Blaugh, E. R.: Notes on the therapeutic uses of helonias.—Nat. elect. M. Assoc. Quart. 1918, v. 10, p. 250–252.

HEXAMETHYLENAMINA.

Lefeldt, M.: It is stated that hexamethylenamine on storage often equires a more or less strong and disagreeable odor, and yet it meets ll of the requirements of the Ph. Germ. It is desirable that it be etermined if the product which has acquired this odor is objectionble.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 168.

Mannich, C.: Hexamethylenamine and antipyrine react in the resence of acids to form a crystalline compound which is gradually eposited from solution.—Boll. chim. farm. 1917, v. 56, p. 279.

Emery, W. O., and Wright, C. D.: Studies in synthetic drug analyis. VI. A procedure is described for the estimation of hexamethyleamine.—J. Ind. & Eng. Chem. 1918, v. 10, p. 606–608.

van Zijp, C.: A note on the use of iodine as a microchemical regent for the identification of formaldehyde and hexamethylenanine.—Pharm. Weekblad. 1918, v. 55, p. 45–47.

Stuwe: Notes on the assay of formaldehyde, hexamethylenetetranine and formalin pastilles.—Pharm. Centralh. 1918, v. 59, p. 27.

Salkowski, E.: A study of the behavior of hexamethylenamine in he organism.—Biochem. Ztschr. 1918, v. 87, p. 143–162, through J. hem. Soc. Lond. 1918, v. 114, part 1, p. 362.

Ustvedt, Y.: A report of the toxic action of hexamethylenamine n the kidneys in a case of poliomyelitis.—Norsk Magazin for Laegeidenskaben, Christiania, 1918, v. 79, p. 657, through J. Am. M. ssoc., 1918, v. 71, p. 696.

HOMATROPINÆ HYDROBROMIDUM.

Richmond, H. D.: The Vitali test for distinguishing homatropine rom atropine, hyoscyamine, or hyoscine is not applicable to the sulhate of homatropine as a violet color is obtained with the lastnentioned salt. The test, however, is conclusive if applied to the ree base liberated from the sulphate.—Analyst, 1918, v. 43, p. 167–168.

von Braun, J., and Miller, E.: The conversion of cocaine into omatropine and certain salts of homatropine is described. The nelting points of the hydrochloride, chloraurate, and picrate are iven.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 235–252, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 233–235.

Werner, Louis E.: Researches on the analogues of homatropine are reported.—J. Am. Chem. Soc. 1918, v. 40, p. 669–674.

HUMULUS.

Guselotto: An essay on the cultivation of hops in Italy. An abstract.—Bull. sc. pharmacol. 1918, v. 25, p. 377–378.

Schmidt, Johs.: From breeding experiments with American and Danish hops, it is concluded that the hop aroma is not so fugitive a character and does not depend so much on local conditions as has been heretofore believed.—Ztschr. ges. Brauw. 1917, v. 39, p. 189–191, 196–198, and 206–207, through Chem. Abstr. 1918, v. 12, p. 401.

Collins, W. D.: C. R. Smith's modification of the Gutzeit test for arsenic in hops is described in detail. Sun-dried hops contain 0.1 to 0.2 part per million of As as As_2O_3; sulphured hops, 0.2 to 26 parts per million.—J. Ind. & Eng. Chem. 1918, v. 10, p. 360–364.

Baker, J. L., and Hulton, H. F. E.: Analytical data relative to the composition of dried spent hops are given.—J. Inst. Brewing, 1917, v. 23, p. 455–457.

HYDRARGYRI CHLORIDUM CORROSIVUM.

Tunmann, O.: An account of the application of the Stas-Otto method of shaking out to the detection of mercuric chloride.—Apoth.-Ztg. 1918, v. 33, p. 454–455.

Kubla: Analytical data relative to the detection of mercuric chloride in cloth fabrics are presented. An abstract.—Boll. chim. farm. 1917, v. 56, p. 170.

Thurston, Azor: Four samples of bichloride of mercury examined assayed from 99.3 to 99.6 per cent $HgCl_2$. One sample contained 0.2 per cent of metals precipitated by H_2S, but soluble in HNO_3, and gave a test for arsenic.—Proc. Ohio Pharm. Assoc. 1918, p. 131.

Stark, J. R.: In an investigation of the germicidal value of common gynecological douching agents, it was found that mercuric chloride solutions (1:1000 and 1:4000) destroyed *Staphylococcus*, *Pyogenes aureus*, and *Bacillus coli* in 15 minutes *in vitro*.—J. Lab. & Clin. Med. 1917, v. 3, p. 199–202.

MacNider, William deB.: A study of acute mercuric chloride intoxication in the dog, with special reference to the kidney injury.—J. Exper. M. 1918, v. 27, p. 519–538.

Sansum, W. D.: In the treatment of mercuric chloride poisoning, the practical therapeutical effort should be directed toward the mechanical removal of the poison from the lumen of the alimentary tract, and antidoting it before it leaves the portal circulation. It would appear that when 4 milligrams, or more, of mercuric chloride per kilo has entered the tissues death regularly occurs.—J. Am. M. Assoc. 1918, v. 70, p. 824–828.

Weiss, H. B.: The treatment of mercuric chloride poisoning by the frequent administration of alkalies is described. By this procedure he acid intoxication produced is counteracted.—J. Am. M. Assoc. 1918, v. 71, p. 1045-1047.

Anon.: The following is suggested as an antidote for poisoning by bichloride of mercury: Sodium hypophosphite 1 gram, water 10 grams, and solution of hydrogen peroxide 5 cubic centimeters.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 20.

Haskell, Charles C., and Courtney, R. H.: A report of experiments to determine the value of calcium sulphide in the treatment of mercuric chloride poisoning.—J. Lab. & Clin. Med. 1917–1918, v. 3, p. 110–114.

Vogel, Wm.: A note calls attention to the value of sodium phosphite as a safe antidote for bichloride poisoning.—Bull. Pharm. 1918, v. 32, p. 216.

Fitzgibbon, Gibbon: A report of a fatal case of poisoning due to the introduction of a 8.75 grain tablet of mercuric chloride into the vagina.—Lancet (The), Lond. 1918, v. 194, p. 406.

Campbell, Walter R.: A report of the results of blood and urine analyses in two cases of mercuric chloride poisoning, one of which was fatal.—Arch. Int. Med. 1917, v. 20, p. 919–930.

HYDRARGYRI CHLORIDUM MITE.

Paderi, Cesare: A note on the incompatibility of calomel with antipyrine. Calomel does not react with antipyrine in aqueous suspension nor in the presence of acid. In an alkaline medium, an organometallic compound is formed which is more toxic than mercuric chloride.—Arch, farmacol. sper. 1918, v. 26, p. 359–380.

Lyons, A. B.: It is recommended that the strength of the iodine solution used in the U. S. P. assay method for calomel be doubled.—J. Am. Pharm. Assoc. 1918, v. 7, p. 939.

Terry, Robert W.: Two to four samples of calomel assayed were below standard. They contained 98.18 and 98.62 per cent of calomel, respectively.—Proc. Ohio Pharm. Assoc. 1918, p. 135.

HYDRARGYRI IODIDUM FLAVUM.

Smits, A.: Crystallographic studies showing that a crystal of yellow mercuric iodide, when heated to its melting point, becomes steadily richer in the red β-variety without any change in crystal form.—Ztschr. physik. Chem. 1917, v. 92, p. 345–350, through Chem. Weekblad, 1918, v. 15, p. 41.

HYDRARGYRI IODIDUM RUBRUM.

Rowe, L. W.: Red mercuric iodide is recommended for intravenous injection instead of mercuric chloride because of its lesser toxicity and its greater germicidal efficiency.—J. Lab. & Clin. Med. 1918, v. 3, p. 412–415.

HYDRARGYRI SALICYLAS.

Gadamer, J.: From investigations, it is concluded that mercuric salicylate differs in its constitution according to the method employed in preparation. The iodometric method for the estimation of mercury in this compound, as given in the Ph. Germ. V, requires revision. An entirely new method is stated to be desirable. The method developed by E. Rupp is recommended as being the most convenient.—Arch. Pharm. 1918, v. 256, p. 263–283.

Constantino: A report of an investigation of various methods for the determination of mercury in mercury salicylate. An electrolytic method is proposed.—Giorn. farm. chim. 1918, v. 67, p. 7–12.

HYDRARGYRUM.

Raubenheimer, Otto: A brief history of mercury and its use in pharmacy and medicine.—J. Am. Pharm. Assoc. 1918, v. 7, p. 445.

Anon.: The United States produced 36,351 flasks of mercury in 1917, exceeding the 1916 output by 6,419 flasks.—Chem. & Drug. 1918, v. 90, p. 98.

Anon.: An editorial discussing the production of mercury in California.—Chem. Met. Eng. 1918, v. 19, p. 237–240.

Anon.: Italy exported 1,115,500 kilos of mercury in 1917 against 766,500 kilos in 1916.—Chem. & Drug. 1918, v. 90, p. 553.

Van Laar, J. J.: Data relative to the critical temperature and pressure of mercury are given.—Proc. Acad. Sci. Amsterdam, 1917, v. 20, p. 138–148, through Chem. Abstr. 1918, v. 12, p. 875.

Ariès, E.: From the known vapor pressures of mercury at different temperatures, the author calculates the critical temperature to be 1,077° C. and the critical pressure to be 420 atmosphere.—Compt. rend. acad. sc. 1918, v. 166, p. 334–337.

Nordlund, Ivar: Descriptions of methods for the production of mercury hydrosols from metallic mercury.—J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 267.

François, Maurice: A description of a new method for estimating mercury by means of zinc filings. The zinc filings bearing the deposited mercury are treated with dilute hydrochloric acid and subsequently with fuming hydrochloric acid, after which the mercury collects in the form of one large globule. This is then washed, dried, and weighed—Compt. rend. acad. sc. 1918, v. 166, p. 950–952; J. pharm. et chim. 1918, v. 18, p. 129.

Wastenson, H.: A description of a method for the estimation of mercury in galenical preparations, such as plasters, pills, and ointments, provided the latter are tolerably free from paraffin. The method is not suitable for compounds containing halogens.—Pharm. Post, 1917, v. 50, p. 125–126, through Analyst, 1918, v. 43, p. 35.

De Rubies, S. Piña: A modification of the Eschka-Holloway method for the rapid estimation of mercury in most of its compounds.—Anales soc. españ. fis. quim. 1918, v. 16, p. 661–689.

Duret, Paul: Notes on the detection, quantitative estimation, and elimination of mercury in the urine.—Compt. rend. soc. biol. 1918, v. 81, p. 737–739.

HYDRARGYRUM AMMONIATUM.

Kolthoff, I. M.: A discussion of pharmacopœial methods for preparing white precipitate. The properties of white precipitate and methods for its determination are also commented upon.—Pharm. Weekblad, 1918, v. 55, p. 208–218.

Holmes, Muriel C. C.: A report of researches to determine the composition of the additive compounds of mercuric chloride and ammonia.—J. Chem. Soc. Lond. 1918, v. 113, p. 74–79.

HYDRASTIS.

Senft, Em.: A comprehensive article dealing with the cultivation of hydrastis.—Pharm. Post, 1917, v. 50, Nos. 1–8, through Pharm. Zentralh. 1917, v. 58, p. 162.

Wasicky, Richard, and Joachimowitz, Marianne: Analytical data showing the hydrastine and berberine content of *Hydrastis canadensis* cultivated in "Kornenburg, Osterreich." Also some notes on the determination of berberine.—Arch. Pharm. 1918, v. 255, p. 497–506.

Ess, Otto: Hydrastis powder may be tested for berberine as follows: moisten a small quantity of powdered hydrastis with 1 drop of alcohol and 2 drops of 30 per cent nitric acid and observe the yellow needles formed under the microscope. Upon warming the crystals disappear and the powder turns brownish-red.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 104–105.

Anderson, George A.: Golden seal has been substituted by twin leaf root on four different occasions.—Proc. N. W. D. A. 1918, p. 235.

Herron, Charles S.: A yield of 0.74 per cent of hydrastine was obtained from the leaves and tops of *Hydrastis canadensis.*—Am. Druggist, 1918, v. 66, No. 10, p. 28–29.

Engelhardt, H.: Of 5 shipments of hydrastis examined 1 was rejected on account of containing only 0.71 per cent of ether-soluble alkaloids.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

Hankey, Wm. T.: The hydrastine content of 4 samples of powdered hydrastis assayed varied from 2.43 to 3.26 per cent.—Proc. Ohio Pharm. Assoc. 1918, p. 131.

HYOSCYAMUS.

Mueller, N. R.: An account of experiments in the cultivation o hyoscyamus in the United States. Assays showed about equal amounts of alkaloids in plants of first and second year's growth.—J. Am. Pharm. Assoc. 1918, v. 7, p. 127.

Rusby, H. H.: Exceptional difficulties have been encountered in the cultivation of hyoscyamus in the United States and most experiments have failed. There is now promise, however, of the production of a superior product and in large quantity.—Proc. New York Pharm Assoc. 1918, p. 193.

Tunmann, O.: An alkaloidal test for the identification of hyoscyamus powder is recommended for introduction into the Ph. Germ. The test is described in detail.—Apoth.-Ztg. 1918, v. 33, p. 315.

Roberts, J. G.: Not one of the lots of hyoscyamus examined was of U. S. P. quality. Three shipments were deficient in alkaloids, as they contained only 0.033 per cent. to 0.054 per cent. The U. S. P requires not less than 0.065 per cent.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 103.

Hankey, Wm. T.: The alkaloidal content of 4 samples of powdered henbane assayed varied from 0.041 to 0.060 per cent; the ash content varied from 13.9 to 28.8 per cent.—Proc. Ohio Pharm. Assoc. 1918, p. 132.

Engelhardt, H.: Of 26 shipments of henbane examined 9 assayed below U. S. P. strength. One shipment marked "herb," consisting of stems, leaves and roots, assayed as much as 0.325 per cent. of total alkaloids. The leaves assayed 0.115 per cent. of mydriatic alkaloids.—Proc. Maryland Pharm. Assoc. 1918, p. 82.

Anderson, George A.: One out of fifteen shipments of hyoscyamus examined was rejected, and that assayed 0.05 per cent. alkaloids.—Proc. N. W. D. A. 1918, p. 230.

HYPOPHYSIS SICCA.

Lubarsch, O.: Iron-containing, as well as noniron-containing, pigments are found in the hypophysis; the two are closely related and are hemoglobinogenous.—Berlin. klin. Wchnschr. 1917, v. 54, p. 65–69. through Physiol. Abstr. 1918, v. 2, p. 618.

Aldrich, T. B.: U. S. patent No. 1,271,111 describes the preparation of a pressor substance from the infundibular lobe of the pituitary gland by extraction with glycerol and subsequent precipitation by means of acetone.—Chem. Abstr. 1918, v. 12, p. 1909.

ICHTHYOL (NONOFFICIAL).

Engelhardt, H.: The supply of genuine ichthyol having been cut off, due to the war, the following substitutes have been put on the market: isarol, thiol, riasol, sulphothyol, ichthyopon, ichthamonon, etc., and quite recently a Japanese product of excellent quality. These products are all more or less obtained by destructive distillation of a slate similar to that occurring in the Tyrolian Alps, from which genuine ichthyol is distilled and which is later on converted nto the ammonium salt of its sulphonic acid.—Proc. Maryland Pharm. Assoc. 1918, p. 80.

INFUSA.

Smith, F. A. U.: A discussion of the advantages of infusions over certain other pharmaceutical preparations. Formulas for the preparation of many infusions are given.—Am. Druggist, 1918, v. 66, No. 6, p. 32 and 37–40; Northwestern Drug. 1918, v. 19, No. 7, p. 23–26.

INFUSUM DIGITALIS.

Monteith, J. D.: Alcohol and aqueous infusions of digitalis were prepared and kept at a temperature of 37° F. for a month. At the end of that time it was found that the alcoholic tincture had retained more of its activity than the aqueous infusion. It was found, however, from further experiments that no important change takes place n the infusion in one week.—Apothecary, 1918, v. 30, No. 4, p. 36.

IODOFORMUM.

Conanducci, E., and Meduri, G.: Data showing the rate of decomposition of iodoform, *per se* and when dissolved in various organic solvents, due to the action of light. Decomposition takes place to the greatest extent in chloroform and to the least extent when dissolved n petroleum ether.—Gaz. chim. ital. 1918, v. 48, p. 238–247.

Durand: A procedure for the preparation of iodoformed oil is described.—J. pharm. et chim. 1918, v. 17, p. 196–197.

IODUM.

Allen, A. W.: The nitrate from Atacama, Chili, is stated to contain iodine which may be recovered.—Mining Sci. Press, 1918, v. 116, p. 522, through Chem. Abstr. 1918, v. 12, p. 1412.

Vincent, V.: English patent 101,870, 1916, describes the manufacture of iodine from algae.—Rev. chim. industrielle, 1918, v. 27, p. 271.

Lenci Francesco: A description of a method for the recovery of iodine from residues obtained in analytical work.—Boll. chim. farm. 1918, v. 57, p. 121–123.

Stephenson, Herbert F.: Iodine may be recovered from dilute residues by treating them with mercuric iodide and subsequently treating the iodide formed with a mixture of nitric and sulphuric acids at 45° C.—Analyst, 1918, v. 43, p. 165–166.

Wood, R. W., and Kimura, M: Data relative to the band and line spectra of iodine are presented.—Astrophys. J. 1917, v. 46, p. 181–196, through Chem. Abstr. 1918, v. 12, p. 788.

Pinkhof, J.: The presence of 0.12 to 2 per cent of chlorine in iodine can be detected by neutralizing with thiosulphate and precipitating the sulphate formed with barium nitrate.—Pharm. Weekblad, 1918, v. 55, p. 236.

Ehrlich, J.: A note on the use of sodium sulphide solution in the quantitative determination of iodine.—Ztschr. analyt. Chem. 1918, v. 57, p. 21–22, through J. Soc. Chem. Ind. 1918, v. 37, p. 240A.

Milks, H. J.: A general discussion of the various solutions of iodine compounds and of iodine for external and internal use. It is concluded that the so-called soluble iodine compounds are probably no more efficient than the tincture of iodine diluted to an equal strength.—Exper. Sta. Record, 1918, v. 39, p. 387.

Editorial: Iodine was found efficient as a prophylactic in goitre in the case of several hundred school girls treated at Akron, Ohio.—J. Am. M. Assoc. 1918, v. 71, p. 2155–2156.

IPECACUANHA.

Koch, E. W.: A history of the use of ipecac and emetine in therapeutics.—Med. Rec. 1918, v. 94, p. 718–719.

Rusby, H. H.: The investigation of Brown, Walters, Koch, Baker, and Ecklin have considerably changed our views regarding the comparative properties of the Brazilian and Colombian varieties of ipecac which are found to be very much the same. As a result, the latter variety has largely replaced the former, which is more expensive.—Proc. New York Pharm. Assoc. 1918, p. 192.

Davies, Wm. W.: It is recommended that powdered ipecac be recognized by the U. S. P. and that a standard of not less than 1.75 per cent nor more than 2.0 per cent of alkaloids be provided.—J. Am. Pharm. Assoc. 1918, v. 7, p. 1055.

Lefeldt, M.: The Ph. Germ. method for the determination of the alkaloids in ipecac is stated to give low results. The method proposed by Panchaud, published in the Geschäft's-Bericht of Caesar and Loretz, 1902, p. 45ff, is recommended for introduction into the new German pharmacopœia.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 180–181.

Pyman, Frank L.: Part 3 of a report of an investigation of the chemical constitution of the alkaloids of ipecac.—J. Chem. Soc. Lond. 1918, v. 113, p. 222–234.

Engelhardt, H.: Of 15 shipments of Carthagena ipecac examined were below U. S. P. strength, and of 9 shipments of Rio ipecac 2 vere not of official strength.—Proc. Maryland Pharm. Assoc. 1918, . 83.

Roberts, J. G.: Two shipments of ipecac examined were of . S. P. quality and yielded 2.28 per cent, and 1.84 per cent, respecively, of alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

Anderson, George A.: Out of nine shipments of ipecac examined ll were satisfactory except one which assayed only 1.21 per cent lkaloids.—Proc. N. W. D. A., 1918, p. 230.

Walters, A. L., et al.: Pharmacological studies of the ipecac alkaoids and some synthetic derivatives of cephaeline.—Lilly Sci. Bull. 918, No. 9, p. 303–348.

Simon, S. K.: A study of the comparative value of ipecac and ts alkaloids in the treatment of intestinal endamoebiasis. The adninistration of powdered ipecac in the form of salol coated pills is ound to be more efficacious than either emetine or cephaeline.—. Am. M. Assoc. 1918, v. 71, p. 2042–2044.

JALAPA.

Scoville, W. L.: Brazilian jalap is obtained from the root of *iptostegia pisonis.* On analysis, the tubers yielded a physiologially active resin resembling that from *Exogonium purga.*—J. Am. Pharm. Assoc. 1918, v. 7, p. 785–787.

Heinrich, G.: A study of the biological action of convolvulin and alapin. The substances exert a haemolytic action in neutral soluion, but they are rendered inactive by alkalies. Purgative action s also lost when the substances are treated with alkali and the haemolytic action can, therefore, be used in testing the value of hese preparations as drugs.—Biochem. Ztschr. 1918, v. 88, p. 13–34.

Westman, L. E., and Rowat, R. M.: The manganese content of jalap tubers, computed on a dry basis of 110° C., is given as 0.0024 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

Engelhardt, H.: Of 10 shipments of jalap examined, 2 were rejected on account of assaying less than 7 per cent of resin. One sample was apparently Tampico jalap. It differed only in shape from the official drug and assayed 18 per cent of total resin, of which only 4 per cent was soluble in ether.—Proc. Maryland Pharm. Assoc. 1918, p. 83.

Anderson, George A.: Two samples of Brazilian jalap have been offered during the past year as a substitute for true jalap.—Proc. N. W. D. A. 1918, p. 236.

JUGLANS, N. F.

Tolm, T.: Medicinal plants of North America. The structure of *Juglans cinerea* and *J. nigra* is illustrated and contrasted microscopically with *Carya* and *Platycarya* species.—Merck's Rep. 1918 v. 27, p. 115 and 168.

KAOLINUM, N. F.

Feldenheimer, Wm.: Canadian patent No. 183,437. For cleaning clay a dilute solution of sodium carbonate is added to the suspending medium.—Chem. Abstr. 1918, v. 12, p. 2047.

Jegler, W.: German patent No. 294,908. Fractional sliming of kaolin is effected by introducing it into an aqueous solution of an organic nonelectrolyte and then subjecting it to a mechanical sliming process.—Chem. Abstr. 1918, v. 12, p. 601–605.

Schurecht, H. G.: The use of sulphuric acid in the sedimentation of kaolins is discussed.—Trans. Am. Ceram. Soc. 1917, v. 19, p. 130–145, through Chem. Abstr. 1918, v. 12, p. 523.

Pickering, S. U.: The flocculation of kaolin by means of electrolytes is described.—Proc. Roy. Soc. Lond. 1918, v. 94A, p. 315–325.

Herzog, J., and Leonhard, M.: A discussion of methods for testing the purity of bolus alba.—Apoth.-Ztg. 1916, v. 31, p. 522, through Pharm. Zentralh. 1917, v. 58, p. 247.

KAVA, N. F.

Murakami, S.: An alcoholic extract of kava root yielded 0.59 per cent of methysticin, 0.66 per cent of pseudomethysticin, 1.2 per cent of yangonin, and 10.3 per cent of resin. On treating the resin with alkali, yangonin, desmethoxy-yangonin, beta-methysticinic acid, and kava acid were obtained.—J. Pharm. Soc. Japan, 1918, No. 438, p. 563–584.

KINO.

Farwell, O. A.: The proper binomial for the plant producing kino is *Lingoum marsupium* (Roxburgh) O. K.—Drug. Circ. 1918, v. 62, p. 536.

Dominguez, Juan A.: Data are given showing the water, tannoid, nontannoid, and insoluble matter content of various Argentine kinos.—Anales soc. quim. Argentina, 1917, v. 5, p. 113–118.

Roberts, J. G.: Two samples of kino examined were not of U. S. P. quality, as they contained more than 12 per cent of moisture and did not yield 45 per cent of alcohol-soluble matter, as required by the U. S. P. One sample also yielded 1.92 per cent excess of ash.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

KOLA, N. F.

Roberts, J. G.: Two lots of kola nut examined assayed 1.63 per nt and 1.54 per cent, respectively, of caffeine, which is within the F. limit of not less than 1.5 per cent.—Proc. Pennsylvania Pharm. soc. 1918, p. 104.

KRAMERIA, N. F.

Norton, Thomas H.: The root of *Krameria triandra*, abundant in ru, yields 38.3 to 42.6 per cent of tannin.—J. Am. Leather Chem. ssoc. 1918, v. 13, p. 441–461, through Chem. Abstr. 1918, v. 12, p. 03.

Wasicky, R.: Results obtained in testing tormentilla, geranium, d bistorta root by the physiologic method of Kobert are reported. ie work was undertaken to determine their suitability as substites for krameria.—Pharm. Post, 1917, v. 50, p. 785–787, through iarm. Zentralh. 1918, v. 59, p. 193.

Brandt: Attention is directed to the possibility of substituting rmentilla rhizomes for rhatany root. A description of the microopical structure of the root is given.—Arch. Pharm. 1918, v. 356, 54–56.

LAC FERMENTATUM, N. F.

Finkelstein, R.: A study of some factors concerned in the preparan of milk fermented with *Bacillus bulgaricus* and *Bacterium acidi ctici*.—J. Dairy Sci. 1917, v. 1, p. 250–258.

Van Slyke, Lucius L., and Baker, John C.: A report of researches determine the free lactic acid in sour milk. Part of the free acid in solution, while a smaller part is absorbed by the casein. Each ust be determined separately.—J. Biol. Chem. 1918, v. 35, p. 147–8.

LAC VACCINUM, N. F.

Osborne, Thomas B., et al: A report on a new alcohol-soluble proin isolated from milk.—J. Biol. Chem. 1918, v. 33, p. 243–251.

de Graaff, W. C.: Observations on the freezing point of milk durg the winter of 1917–1918.—Chem. Weekblad, 1918, v. 15, p. 544–6.

Cox, H. E.: A report of experiments with artificial coloring matr in milk.—Analyst, 1918, v. 43, p. 166–167.

Gerö, W.: Some new considerations on the examination of milk. study of the relation between refraction and density.—Ztschr. nters. Nahr.-u. Genussm. 1916, v. 32, p. 572–576, through Chem. bstr. 1918, v. 12, p. 73.

Pritzker, J.: Contributions to the cryoscopy and refractometry of ilk.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 305–307.

Schoorl, N.: An investigation of the influence of the method preparation on the specific gravity and refractive index of mil serum.—Chem. Weekblad, 1918, v. 15, p. 1089–1096; see also J. van der Harst and C. H. Keers, ibid. 1918, v. 15, p. 1096–1097.

Kan, A. J. H.: A comparative study of the influence of vario methods of preparation on the refraction of milk serum. An a stract.—Chem. Weekblad, 1918, v. 15, p. 1290.

Arup, P. S.: An investigation of the reductase test for milk.—Analyst, 1918, v. 43, p. 21–31.

Hildebrandt, A.: Preference is expressed for the Schern and Schel hase combined guaiac resin and guaiacol reagent and the Rother fusser reagent (p-phenylenediamine hydrochloride with guaiacol) tests to distinguish raw from heated milk.—Milchwirtschaft. Ze tralbl. v. 46, p. 23, through Zentralbl. Biochem. u. Biophys. 1918, 19, p. 396–397.

Barthel, Ch.: A comparison of the reductase test with othe methods for the determination of the hygienic qualities of milk.—Mon. Sci. 1918, v. 8, p. 176–181, through Chem. Abstr. 1918, v. 1 p. 2628.

Stutterheim, G. A.: From an experimental investigation of th value of various indicators for the determination of the acidity o milk, it is concluded that methyl red is the most satisfactory.—Pharm Weekblad, 1917, v. 54, p. 1120–1121.

Baker, John C., and Van Slyke, Lucius L.: A description of method for making electrometric titrations of milk and other sol tions containing proteins. Illustrated.—Tech. Bull. 65, N. Y. Agri Exper. Sta. 1918, p. 14–20.

Agrestinis, A.: Observations on the value of the Walker meth for the determination of casein in milk.—Staz. sper. agrar. ital. 191 v. 50, p. 106–114, through Chem. Abstr. 1918, v. 12, p. 1570.

Meillère, G.: Notes on the exact determination of butter fat milk by the Adam method as employed in the Paris hospitals.— pharm. et chim. 1919, v. 20, p. 150–156.

Reiss, F.: An investigation of the influence of paraffin on the Ge ber method for the determination of fat in milk.—Milchwirtsc Zentr. 1918, v. 47, p. 52–54, through J. Soc. Chem. Ind. 1918, v. 3 p. 346A.

Day, F. E., and Grimes, M.: Notes on some conditions affectin the accuracy of the Gerber method for the determination of fat milk.—Analyst, 1918, v. 43, p. 215.

Repiton, Fernand: A contribution to the analysis of milk. De scriptions for the determination of fat in milk and of casein withou centrifugation.—Ann. chim. analyt. 1918, v. 23, p. 11–15.

Anon.: A study of the Babcock test for butter fat in milk.—Re Iowa Agric. Exper. Sta. 1918, p. 1–30.

Wardlaw, H. S. Halcro: Data relative to the relation between the at-content and the electrical conductivity of milk are given. It is ound that removal of fat from milk increases the electrical conluctivity.—Proc. Linn. Soc. N. S. W. 1918, v. 43, p. 613–625.

Salomon, Hans, and Diehl, Rudolf: A contribution to the testing f cow's milk, with special reference to the determination of milk ugar.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 493–498.

Pacini, A. J. P., and Russell, D. W.: A description of a colorinetric method for the determination of lactose in milk. The method s based on the fact that lactose forms a colored compound when eated with an aqueous solution of picric acid and an alkali.—J. Biol. hem. 1918, v. 34, p. 505–507.

Folin, Otto, and Denis, W.: Two methods for the estimation of actose in milk are described. One method is based on titration and he other is a colorimetric method. The former is considered to ive the more accurate results.—J. Biol. Chem. 1918, v. 33, p. 521–524.

Panchaud, L., and Auerbach E.: Comparative determinations of actose in milk by means of the refractometer and by Allihn's method ielded concordant results.—Schweiz. Ver. anal. Chem. May 1918; hem. Ztg. 1918, v. 42, p. 528, through J. Soc. Chem. Ind. 1918, v. 37, 780A.

Elsdon, G. D.: A modification of Gayaux's test for sucrose in milk onsists of treating 15 cubic centimeters of milk with 1 cubic centineter of 3 N-hydrochloric acid and 0.5 gram of resorcinol. If five lrops of the resulting mixture are dried on a white tile or a water ath, a red coloration is obtained in the presence of as little as 0.02 er cent of sucrose.—Analyst, 1918, v. 43, p. 292–293.

Schoorl, N.: A discussion of formulas for calculating the fat-free esidue of milk. Data are also given showing the relation of these ormulas to the one evolved by the author.—Pharm. Weekblad, 1918, 55, p. 1645–1664.

Weehuizen, F.: A modification of Selivanov's reaction for the letection of adulteration of cow's milk with cocoanut milk.—Pharm. Weekblad, 1918, v. 55, p. 831–832.

Taylor, G. B.: Experiments on the determination of cow manure n milk are reported.—J. Dairy Sci. 1917, v. 1, p. 303–312, through Chem. Abstr. 1918, v. 12, p. 1569.

Durand, Halsey and Stevenson, Reston: A report of researches n the detection of added water in milk.—J. Ind. & Eng. Chem. 1918, v. 10, p. 26–30.

Müller-Hössly, E.: Notes on the determination of added water in milk and on the relation between specific gravity and the refractive ndex of calcium chloride serum.—Mitt. Lebensm. Hyg. 1918, v. 9, p. 47–54.

Harris Leslie J.: A new formula for the calculation of added water in milk. In this formula the percentage of added water is calculated on the assumption that the original milk before watering contains the minimum of fat (3 per cent) and solids-not-fat (8.5 per cent).—Analyst, 1918, v. 43, p. 345–347.

Allen, Paul W.: A detailed description of a new microscopic method of counting bacteria adapted to all grades of raw and pasteurized milk.—J. Infect. Dis. 1918, v. 22, p. 245–251.

Sears, H. J., and Case, Lulu L.: Some observations on the efficiency of the present standard agar for the estimation of bacteria in milk.—J. Bakteriol. 1918, v. 3, p. 531.

Chick, Harriette et al.: A study of the antiscorbutic value of cow's milk.—Bichem. J. 1918, v. 12, p. 131–153.

LAPPA, N. F.

Anderson, George A.: Only a few lots of burdock root examined were adulterated with second-year roots.—Proc. N. W. D. A. 1918, p. 234.

LEPTANDRA, N. F.

Anderson, George A.: One lot of leptandra examined contained 30 per cent of dirt.—Proc. N. W. D. A. 1918, p. 235.

LIMONIS CORTEX.

Mach, F., and Lederle, P.: Data are presented showing the composition of lemon peel as indicated by water, crude protein, crude fat, nitrogen-free extractives, crude fiber, and ash determinations.—Chem. Ztg. 1917, v. 41, p. 830, through J. Soc. Chem. Ind. 1918, v. 37, p. 105A.

LINIMENTA.

Schmid, A.: Cod liver oil is recommended as a substitute for sesame and olive oils in the preparation of the liniments of the Swiss pharmacopœia. The ammonium hydroxide or chloroform used masks the fishy odor to a sufficient degree.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 74.

von Friedrich Oscar: A procedure for the determination of ammonia, oil, and camphor in ammoniated camphor liniment is described. Data obtained in the analysis of a number of samples of this liniment purchased in Stockholm are presented in the form of a table.—Svensk farm. Tidskr. 1918, v. 22, p. 277–280.

Anon: The following formula for capsicum liniment is recommended for introduction into the new edition of the Ph. Germ.: Tincture of capsicum 200 parts, oil of mustard 1 part, synthetic camphor 40 parts, oil of turpentine 60 parts, ether 60 parts, alcohol 1,550 parts to be mixed with a solution of 40 parts of sodium chloride in 200 parts of water and 100 parts of ammonia water.—Pharm. Zentralh. 1918, v. 59, p. 213.

LINIMENTUM AMMONIÆ.

Raubenheimer, Otto: A formula for the preparation of ammonia liniment, using peanut oil in place of sesame oil, is presented.—Proc. New Jersey Pharm. Assoc. 1918, p. 69.

Sklepinski: Ammonia liniment is prepared by mixing yellow paraffin oil and ammonia water in the proper proportions and adding, drop by drop under constant agitation, liniment of soft soap until a milky mixture is obtained. Twenty drops of soap liniment are required to make 100 grams of the finished preparation.—Pharm. Post, 1918, v. 51, p. 174.

Patocka, J.: Ammonia liniment is prepared by gently warming 32 grams of elain with 288 grams of yellow vaselin oil and adding 150 grams of spirit of ammonia. After shaking vigorously the mixture is diluted with 80 grams of distilled water. An abstract.—Pharm. Zentralh. 1918, v. 59, p. 244; see also H. Terry, Apoth.-Ztg. 1918, v. 33, p. 315.

Anon.: The following formula is given for the preparation of ammonia liniment: soft soap, 15 grams; liquid petrolatum, 15 grams; ammonia water, 20 grams; decoction of carrageen (2:100), 50 grams.—Pharm. Ztg. 1917, v. 62, p. 654, through Pharm. Zentralh. 1918, v. 59, p. 39.

LINIMENTUM CAMPHORÆ.

Raubenheimer, Otto: It is suggested that peanut oil be used to replace cottonseed oil in the U. S. P. formula for camphor liniment.—Proc. New Jersey Pharm. Assoc. 1918, p. 70.

von Friedrichs, Oscar: The polariscopic method is recommended for the determination of camphor in oils. Data of this nature are given for solutions of camphor in rape, olive, and sesame oils.—Svensk farm. Tidskr. 1918, v. 22, p. 197–202.

LeMoignic, E., and Gautrelet, J.: A physiological study of the effects of intravenous injections of camphorated oil.—Compt. rend. soc. biol. 1918, v. 81, p. 519–521.

Table showing some of the analytical results reported for camphor liniment.

Reporters.	Number of samples.		References.
	Exmined.	Rejected.	
Lea, E. J	21	6	Rep. California Bd. Health, 1918, p. 167.
Engelhardt, H.	86	15	Proc. Maryland Pharm. Assoc. 1918, p. 83.
McLaughlin, Allan J	168	27	Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.
Todd, A. R	86	32	Rep. Michigan D. & F. Com. 1918, p. 87.
Howard, Chas. D	23	13	Rep. New Hampshire Bd. Pharm. 1918, p. 84.
Van Buskirk, L. H	8	1	Ohio Public Health J. 1918, v. 9, p. 44, 134, and 181.
Anon	2	0	Bull. Vermont Bd. Health, 1918, v. 18, No. 3 and 4: v. 19, No. 1.

LINIMENTUM CHLOROFORMI.

Anon.: Of 32 samples of chloroform liniment examined, 15 wer found deficient in one or more constituents. 10 were low in chloroform, 2 in camphor, and in most there was an excess of camphor Four separated into layers due to too little alcohol.—Bull. New Hampshire Bd. Health, 1918, v. 6, p. 24.

Todd, A. R.: One sample of chloroform liniment examined was of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

LINIMENTUM SAPONATO-CAMPHORATUM, N. F.

Peters, H.: A note on the derivation of the name opodeldoc. It is stated to be a contraction of the words "opoponax," "bdellium," and "aristolochia."—Pharm. Ztg. 1918, v. 63, p. 370, through Pharm Zentralh. 1918, v. 59, p. 228.

Fassati: A formula is given for the preparation of camphorated soap liniment. The stearic acid soap forming the base of the liniment is prepared by saponifying 20 grams of stearin with 11 grams of soda and 60 grams of water.—Pharm. Post. 1917, v. 50, p. 197 through Pharm. Zentralh. 1917, v. 58, p. 430.

Arends, G.: A method for preparing volatile opodeldoc is described.—Pharm. Ztg. 1918, v. 63, p. 48, through Chem. Zentralbl 1918, v. 89, part 1, p. 565.

Boucher: A description of a method for the detection of denatured alcohol in "opodeldoc balsam." Bull. sc. pharmacol. 1918, v. 25, part 1, p. 295–296.

Anon.: The red color sometimes observed in camphorated soap liniment is stated to be due to the action of ammonia on thymol. It is further stated that this color does not form if oil of thyme is used in place of thymol.—Pharm. Zentralh. 1917, v. 58, p. 550.

LINIMENTUM SAPONIS.

Éwe, George E.: The U. S. P. distillation process for the determination of alcohol in soap liniment gave an average of 98.5 per cent of the known absolute alcohol content of 4 samples of soap liniment examined. The volatile oil which distills over with the alcohol has but little effect on the ultimate result.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 164.

Todd, A. R.: Of 3 samples of soap liniment examined, 1 was not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

Frary, Guy G.: Of 2 samples of soap liniment examined, 1 was rejected.—Rep. South Dakota F. & D. Com. 1918, p. 64.

Anon.: The only sample of soap liniment examined proved to be of U. S. P. quality.—Bull. Vermont Bd. Health, 1918, v. 18, No. 4.

LINIMENTUM SAPONIS MOLLIS.

Anon.: The following formula for liniment of soft soap is rec-
nmended for introduction into the new edition of the Ph. Germ.:
leic acid 90 parts, alcohol 310 parts, caustic soda 12.78 parts, and
ater 200 parts.—Pharm. Zentralh. 1918, v. 59, p. 213.

Laing, Mary E.: An investigation of the state of potassium oleate
nd of oleic acid in solution in dry alcohol.—J. Chem. Soc. Lond.
918, v. 113, p. 435–444.

LINUM.

Anon.: Analysis of samples of flaxseed from Rhodesia indicate
at the seed from this source contains a normal amount of oil of
ood quality.—Bull. Imp. Inst. 1917, v. 15, p. 576–579.

Gill, A. H.: Carotin is reported as being a constituent of flax-
eed.—J. Ind. & Eng. Chem. 1918, v. 10, p. 612–614.

Ewe, George: It is stated that crushed flaxseed can be made a
alatable laxative by heating at 120° C. for several hours, thus im-
arting a nutty flavor to the material.—Proc. Pennsylvania Pharm.
ssoc. 1918, v. 41, p. 163.

LIQUORES.

van Itallie, E. I.: Notes on the preparation of isotonic solutions
or injection. A table is given showing the differences between the
bserved and calculated freezing-point depressions of a number of
alts commonly used for injection and of the observed and calculated
mounts of sodium chloride necessary to make the solutions iso-
onic.—Pharm. Weekblad. 1918, v. 55, p. 202–208; Bull. sci. pharma-
ol. 1918, v. 25, part 2, p. 257–263.

Knight, William A.: A discussion of methods of calculating the
sotonic coefficients of solutions.—Chem. & Drug. 1918, v. 90, p. 693.

Lyon, G.: Formulæ for the preparation of isotonic and hypertonic solutions of glucose, lactose, and sucrose are given.—L'Union pharm. 1918, v. 59, p. 306.

Artl, E.: Methods are described for the preparation of the fol-
owing solutions: Liquor Ferri oxychlorati, Liquor Ferri albuminati, Liquor Ferri peptonati, and Liquor Ferri caseinata.—Apoth.-Ztg. 1918, v. 33, p. 179–180 and 286.

Anon.: Notes by Marcussens on the preparation of the solutions of morphine acetate and chloride of the Danish pharmacopœia.—Arch. Pharm. Chem. 1918, v. 25, p. 93–94.

Anon.: A formula for the preparation of Liquor Formalhehydi saponatus suggested for introduction into the German pharmacopœia is as follows: Oleic acid 20 grams, alcohol 10 grams, solution of potassium hydroxide 26 grams, formalin 44 grams, lavender oil drop.—Pharm. Zentralh. 1918, v. 59, p. 212

Mossler, G.: A report of experiments on the sterilization of alkaloid solutions.—Ztschr. österr. Apoth.-Ver. 1917, v. 51, p. 489–492, 505–507, 521–523, and 537–538, through Chem. Zentralbl. 1918, v. 2 p. 207.

Utech, P. H.: The growth of microorganisms and fungi in stoc solutions of alkaloids or of the halogen salts can be prevented i large part if the solutions are prepared from distilled water whic has been boiled and allowed to cool just previous to use.—Apothecary, 1918, v. 30, No. 8, p. 24.

White, W. R.: A report of an investigation to determine the caus for variations in the color of solution of ferric citrochloride.—J. Am. Pharm. Assoc. 1918, v. 7, p. 25.

Bradley, Theodore J.: A further study of percentage solutions. Much misconception about the meaning of percentage as applied to solutions seems to persist in spite of the teaching which students of pharmacy receive.—Drug. Circ. 1918, v. 62, p. 333–335.

LIQUOR ALUMINI ACETATIS, N. F.

Anon.: Solutions of aluminum acetate can be stabilized by the addition of 30 grams of boric acid per liter.—Boll. chim. farm. 1918, v. 57, p. 104.

Wolffenstein, R.: A study of the effect of alkali sulphates on solutions of aluminum salts.—Ber. deutsch. pharm. Gasellsch. 1917, v. 27, p. 476–482.

LIQUOR ALUMINI SUBACETATIS, N. F.

Anon.: Comments on the Ph. Germ. tests for the purity of aluminum sulphate, with special reference to its use in the preparation of the solution of aluminum subacetate.—Pharm. Zentralh. 1917, v. 58, p. 278.

Rustung, G.: It is stated that the aluminum sulphate used in the preparation of solution of aluminum subacetate should contain 48.59 per cent of water of crystallization, that the calcium carbonate must be pure and that the acetic acid should not be too strong.—Norges Apotek. Tidskr. 1918, v. 26, p. 297–299, through Apoth.-Ztg. 1918, v. 33, p. 444.

Rupp, E.: A criticism of the gravimetric method of the Ph. Germ. for the determination of aluminum in the solution of aluminum subacetate. An improved method is described.—Apoth. Ztg. 1918, v. 33, p. 72, through Chem. Zentralbl. 1918, v. 89, part 1, p. 782–783.

Lefeldt, M.: Notes on the gelatinization test for the solution of aluminum subacetate as described in the Ph. Germ.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 171–173.

LIQUOR ARSENI ET HYDRARGYRI IODIDI.

Weinland, R. F., and Gruhl, Paul: An investigation of the compounds formed by the reaction of arsenious acid with iodides of multivalent metals.—Arch. Pharm. 1917, v. 255, p. 467–481.

LIQUOR CALCIS.

Effront, Jean: A discussion of the use of lime water in bread making.—Mon. Sci. 1917, v. 7, p. 241–246.

LaWall, C. H.: One sample of lime water examined proved to be nothing but tap water.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

Frary, Guy G.: Two samples of lime water examined came up to the U. S. P. standard for calcium hydroxide.—Rep. South Dakota F. & D. Com. 1918, p. 64.

Eskew, Harry L.: One of two samples of lime water examined was rejected on account of a low calcium hydroxide content.—Rep. Tennessee F. & D. Dept. 1918, p. 20.

LIQUOR CHLORI COMPOSITUS, N. F.

Richter, E.: It is suggested that the new edition of the German pharmacopœia direct that chlorine water intended for use as a reagent be preserved in one cubic centimeter ampoules of brown glass. That kept in stock should be preserved in 250 cubic centimeter ampoules.—Apoth.-Ztg. 1918, v. 33, p. 191–192, through Chem. Zentralbl. 1918, v. 2, p. 139–140. See also Pharm. Zentralh. 1918, v. 59, p. 207.

LIQUOR CRESOLIS COMPOSITUS.

Éwe, George E.: It is suggested that corn oil or rosin be substituted for linseed oil in the manufacture of compound solution of cresol.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 170–171.

Barnstead, S. O.: In a discussion of cresol solutions, it is recommended that oleic acid be used in place of linseed oil in the preparation of the compound cresol solution of the U. S. P.—Pract. Druggist, 1918, v. 36, No. 8, p. 45–46.

LIQUOR FERRI CHLORIDI

Lefeldt, M.: A discussion of the Ph. Germ. method of testing for the presence of nitric acid in the solution of ferric chloride.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 173–174.

LIQUOR FERRI SALICYLATIS, N. F.

Mueller, Bertha: The following formula is suggested for the solution of ferric salicylate: citric acid, 8.5; methyl salicylate, 6.5; sodium salicylate, 125; tincture of ferric citrochloride, 125; aromatic elixir, 150; distilled water to make 1000.—Nat. Druggist, 1918, v. 48, p. 186.

LIQUOR FORMALDEHYDI.

Vanderkleed, C. E., and Éwe, G. E.: Three ways of producing formaldehyde from paraformaldehyde are suggested. For the extemporaneous preparation of formaldehyde a paraformaldehyde-barium peroxide tablet is recommended.—Apothecary, 1918, v. 30, No. 4, p. 34–35.

Hofmann, K. A., and Schibsted, Helge: A report of investigations instituted for the purpose of preparing formaldehyde and methyl alcohol from formates.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 1398–1418.

McCarthy, D. M.: U. S. patent No. 1,265,463. A jelly for disinfecting is prepared by adding a 5 per cent solution of agar-agar to a 40 per cent solution of formaldehyde.—Chem. Abstr. 1918, v. 12, p. 1687.

Moore, Benjamin, and Webster, T. A.: A study of the action of light on concentrated solutions of formaldehyde.—Proc. Roy. Soc. Lond. 1918, v. 90B, p. 168–186.

Maue, G.: The poor agreement in the tabulated values of Luettke and of Auerbach and Barschall show that the density of commercial formaldehyde solutions offers no certain criterion of their actual strength. The hope is expressed that the present standards for density will be modified or entirely omitted in the revision of the Ph. Germ., and that a method for the evaluation of the solution similar to the one described by the author will be substituted.—Pharm. Ztg. 1918, v. 63, p. 197–198, through Chem. Zentralbl. 1918, v. 2, p. 141.

Gradenwitz, H.: In referring to a communication of Maue, it is shown that the methyl alcohol content of formaldehyde solution is by no means unimportant, since too small an amount of methyl alcohol renders the formaldehyde solution unstable, inducing the formation of di- and trioxymethylene. The Ph. Germ. requirement of 1.079 to 1.081 for specific gravity assumes a methyl alcohol content of 13 per cent, an amount sufficient to maintain a clear solution indefinitely.—Pharm. Ztg. 1918, v. 63, p. 241, through Chem. Zentralbl. 1918, v. 2, p. 395.

Stüwe, W.: An iodometric method for the determination of formaldehyde and hexamethylenamine is described.—Arch. Pharm. 1914, v. 252, p. 430, through Pharm. Zentralh. 1918, v. 59, p. 27.

van Zijp, C.: Formaldehyde can be identified by converting it nto hexamethylenamine with ammonia and adding an aqueous soution of iodine and potassium iodide. The crystals which form ire characteristic.—Pharm. Weekblad, 1918, v. 55, p. 45–47.

Bauroth, Martin: A description of a method for the determinaion of methyl alcohol in formaldehyde solutions.—Apoth.-Ztg. 1918, v. 33, p. 187.

Bolten, D. G. J.: From comparative tests it is concluded that the ime method for generating formaldehyde gas from formalin solutions is more effective than the permanganate method.—Pharm. Weekblad, 1918, v. 55, p. 60–61.

Crandall, R. P.: Formaldehyde gas is liberated from solution for disinfecting purposes by means of barium dioxide—1.5 pounds of the latter to 1 pint of solution.—U. S. Naval Med. Bull. 1917, v. 11, p. 519–520.

Hankey, Wm. T.: The formaldehyde content of 4 samples of formaldehyde solution assayed varied from 36.7 to 37.83. One sample contained a trace of iron and was pink in color.—Proc. Ohio Pharm. Assoc. 1918, p. 132.

Todd, A. R.: Of 7 samples of formaldehyde examined, 1 was not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

LIQUOR HYDROGENII DIOXIDI.

Prideaux, E. B. R.: A brief discussion of the preparation of hydrogen dioxide from $H_2S_2O_8$, $K_2S_2O_8$, and $(NH_4)_2S_2O_8$, and by oxidation of cathodic hydrogen.—J. Soc. Chem. Ind. 1918, v. 37, p. 257–259T.

Maass, O., and Herzberg, O.: Notes on the preparation and properties of pure hydrogen dioxide, and on the preparation of concentrated solutions of hydrogen dioxide in large quantities.—Can. Chem. J. 1918, v. 2, p. 196.

Liebknecht, O.: U. S. patent No. 1,262,589. A solution containing 10 per cent or more of H_2O_2 is obtained in a single operation by adding concentrated sulphuric acid to a suspension of sodium perborate in water.—Chem. Abstr. 1918, v. 12, p. 1589.

Schaidhauf, A.: U. S. patent No. 1,275,765. A non-acid solution of hydrogen peroxide is stabilized by the addition of aluminum hydroxide, oxide, silicate, or other insoluble aluminum compound.—Chem. Abstr. 1918, v. 12, p. 2111.

Cambe, J., and Diacono, H.: An investigation of the effect of neutralizing solutions of hydrogen peroxide with sodium borate. The results obtained with the use of phenolphthalein, helianthine, and Poirrier's orange as indicators are presented.—J. pharm. et chim. 1918, v. 18, p. 12–17.

Anon.: In the Ph. Germ. test for oxalic acid in solution of hydrogen peroxide, not over 5 drops of sodium acetate solution should be used.

It is suggested that this be stated in the new edition of the Ph. Germ.—Pharm. Zentralh. 1918, v. 59, p. 208.

Lefeldt, M.: It is recommended that the new Ph. Germ. should direct that hydrogen peroxide solution, after acidifying with nitric acid, should only become slightly opalescent at the most on the addition of silver nitrate solution. Every precaution should be taken to guard against the presence of free chlorine in this preparation.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 169–171.

Frerichs, G.: The permanganate method for the evaluation of solution of hydrogen peroxide is recommended for introduction in the Ph. Germ. The method, as devised by the author, is described in detail.—Apoth.-Ztg. 1916, v. 31, p. 620, through Pharm. Zentralh. 1917, v. 58, p. 336–337.

Anon.: A new method for assaying solutions of hydrogen dioxide consists in reducing the hydrogen dioxide with a measured amount of N/5 solution of arsenous acid and titrating the excess of the latter with N/5 potassium iodate solution. An abstract.—Merck's Rep. 1918, v. 27, p. 63.

Kleinstück, M.: An investigation of the reducing properties of hydrogen peroxide. Silver chloride, suspended in potassium hydroxide solution, is quickly reduced to metallic silver by hydrogen peroxide.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 108–111, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 107.

Rothmund, Victor, and Burgstaller, Alexander: An investigation of the reaction between ozone and hydrogen peroxide.—Monatsh. Chem. 1917, v. 38, p. 295–303, through J. Chem. Soc. 1918, v. 114, part 2, p. 16–17.

Denigès, G.: A reagent for testing for hydrogen peroxide consists of a mixture of 2 cubic centimeters of a 5 per cent solution of tartaric acid and 2 drops of a 5 per cent ammoniacal ferrous sulphate solution. On adding a small quantity of solution of hydrogen peroxide and 6 drops of soda solution to this mixture, a violet coloration results.—J. pharm. et chim. 1918, v. 17, p. 282.

Quartaroli, A.: A method for the estimation of minute quantities of nitrites and hydrogen peroxide in the presence of each other is described.—Gaz. chim. ital. 1918, v. 48, part 1, p. 102–111.

Roberts, J. G.: All of the samples of solution of hydrogen peroxide examined were of U. S. P. quality except one lot which contained a slight excess of nonvolatile matter and two lots which showed a slight excess of free acid.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 107.

Anon.: According to a U. S. patent recently granted to Weber, crystals containing 35 per cent of hydrogen dioxide can be obtained by mixing about 4 per cent of carrageen moss and 60 per cent or more of urea with a concentrated solution of hydrogen dioxide and subseuently cooling the mixture with ice.—Apothecary, 1918, v. 30, No. 0, p. 25.

LIQUOR HYPOPHYSIS.

Spaeth, Reynold A.: A method for the standardization of pituiary extract, in which the "killiefish" or mummrechog, *F. heterocilius*, a common minnow of the Atlantic coast, is used, is described. he method depends on the fact that the melanophores of a scale of his fish contract completely when placed in a pituitary solution.—. Pharmacol. 1918, v. 11, p. 209–220.

Atwell, W. J., and Marinus, C. J.: A comparison of the activity f extracts of the pars tuberalis with extracts of other regions of the x pituitary.—Am. J. Physiol. 1918, v. 47, p. 76–91.

Pittenger, P. S.: From experiments on the isolated uterus it is oncluded that small amounts of alcohol do not destroy the physioogic activity of pituitary extracts.—J. Am. Pharm. Assoc. 1918, v. 7, . 851. See also H. C. Hamilton, ibid. p. 1030–1031.

Rees, Maurice H.: A study of the influence of pituitary extract on he daily output of urine.—Am. J. Physiol. 1918, v. 45, p. 471–484.

Itagaki, M.: A study of the effect of certain gland extracts upon he uterus of the rat.—Quart. J. Exper. Physiol. 1907, v. 2, p. 39–46.

Knowlton, F. P., and Silverman, A. C.: From experiments it is oncluded that the diuretic action of pituitary extract seems to depend entirely on vascular changes and increased filtration pressure ccurring in the kidneys.—Am. J. Physiol. 1918, v. 47, p. 1–12.

Kosmak, George W.: A discussion of the use and abuse of pituiary extract with special emphasis on the need of caution in its use.—. Am. M. Assoc. 1918, v. 71, p. 1117–1119.

Kirmisson, E.: Good results are recorded in the use of pituitary xtract in the treatment of paralysis of the intestines.—Bull. Acad. Méd. 1918, v. 79, p. 82, through Physiol. Abstr. 1918, v. 3, p. 267.

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LIQUOR IODI COMPOSITUS.

Bachman, Gustav: Of three lots of Lugol's solution examined, one vas slightly below the U. S. P. standard for strength.—Proc. Minnesota Pharm. Assoc. 1918, p. 118.

LIQUOR MAGNESII CITRATIS.

Monteith, J. D.: The white precipitate which frequently appears n the solution of magnesium citrate is stated to be $Mg_3(C_6H_5O_7)_2$ $13H_2O$. Wijer avoided this precipitation by doubling the acidity of he solution.—Apothecary, 1918, v. 30, No. 4, p. 36.

Bachman, Gustav: Of 14 samples of solution of magnesium citrate examined, 10 were clear, sparkling solutions and were considerably above the minimum requirement of the U. S. P. in MgO content. Four of the samples were slightly yellow in color, turbid, and deficient in pharmacopœial assay requirements.—Proc. Minnesota Pharm. Assoc. 1918, p. 119; Northwestern Drug. 1918, v. 19, No. 4, p. 52-53.

Snapp, E. L.: Two samples of solution of citrate of magnesia examined came up to the standards prescribed by the U. S. P.—Proc. Kentucky Pharm. Assoc. 1918, p. 44.

LIQUOR PEPSINI AROMATICUS, N. F.

Mueller, Bertha: The following formula is suggested for aromatic solution of pepsin: Pepsin, 17.5; oil of cinnamon, 0.25; oil of cloves, 0.5; oil of pimenta, 0.25; alcohol, 35; hydrochloric acid, 10; glycerin, 100; talcum, 15; distilled water to make 1,000.—Nat. Druggist 1918, v. 48, p. 486.

LIQUOR PLUMBI SUBACETATIS.

Anon.: The introduction into the Ph. Germ. of the following method for the preparation of solution of lead subacetate is recommended: Rub 3 parts of lead acetate with 1 part of litharge, place in a flask which can be tightly stoppered, shake with 10 parts of water intermittently over a period of 8 days, filter and dilute the solution to a specific gravity of 1.235 to 1.24.—Pharm. Zentralh. 1918, v. 59, p. 212.

LIQUOR POTASSII ARSENITIS.

Terry, Robert W.: A sample of Fowler's solution prepared according to the U. S. P. IX assayed 0.941 per cent As_2O_3 after standing six months. It is suggested that the U. S. P. assay for Fowler's solution should be based on some method that will give the total arsenic per cent instead of only the arsenious arsenic.—Proc. Ohio Pharm. Assoc. 1918, p. 135.

Table showing some of the analytical results reported for Fowler's solution.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Snapp, E. L.	2	1	Proc. Kentucky Pharm. Assoc. 1918, p. 44.
Penniman, W. B. D.	134	12	Rep. Maryland Bd. Health, 1915, p. 174.
Todd, A. R.	21	19	Rep. Michigan D. & F. Com. 1918, p. 87.
Bachman, Gustav	3	3	Northwestern Drug. 1918, v. 19, No. 4, p. 52.
Frary, Guy G.	1	0	Rep. South Dakota F. & D. Com. 1918, p. 64.
Anon.	4	2	Bull. Vermont Bd. Health, 1918, v. 18, Nos. 3 and 4, v. 19, No. 1.

LIQUOR POTASSII HYDROXIDI.

Winkler, L.: The absorption of carbon dioxide by alkali solutions may be retarded by the use of 30 per cent of glycerine in their preparation.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 113; Pharm. Post, 1918, v. 51, p. 354, through Pharm. Zentralh. 1918, v. 59, p. 257.

LIQUOR SODÆ CHLORINATÆ.

Raubenheimer, Otto: A brief review of the history of chlorine, Labarraque's solution, and Dakin's solution.—Am. Drug. 1918, v. 66, p. 62.

Ebert: A discussion of methods for preparing the solution of chlorinated soda with reference to their suitability for introduction into the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 401.

Anon.: An examination of commercial solutions of sodium hypochlorite for the purpose of determining the rate and degree of deterioration.—Rep. Lab. Am. M. Assoc. 1918, v. 11, p. 81–83.

Vanderkleed, C. E. and Ewe, G. E.: Data showing the effects of manganese salt on the keeping qualities of solutions of sodium hypochlorite are presented in tabular form. From the results obtained it is concluded that only chlorinated lime which yields a colorless, and not a pink, solution is suitable for the preparation of the solution of chlorinated soda.—Apothecary, 1918, v. 30, No. 4, p. 34.

Dienert, F. and Wandenbulke, F.: A description of a method for the estimation of free chlorine in solutions of hypochlorites. The method is essentially a modification of that of Penot.—Ann. chim. analyt. 1918, v. 23, p. 1–3.

Rupp, E.: A method for the estimation of chlorites and hypochlorites is described. Two aliquot parts of the solution to be tested are taken. The hypochlorite is determined by adding potassium iodide and titrating the liberated iodine with standard thiosulphate solution. A similar titration is carried out with the second part after the addition of potassium bromide in concentrated hydrochloric acid. The difference between the two results represents the amount of chlorate in the solution.—Ztschr. and Chem. 1917, v. 56, p. 580–586, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 125.

Mikkelson, Nels: A note on the pharmaceutical origin of Dakin's solution.—Drug. Circ. 1918, v. 62, p. 450.

Ransford-Gay, St. Claire: Some practical hints are given concerning the preparation and administration of Dakin's solution.—J. Am. Pharm. Assoc. 1918, v. 7, p. 258–261.

Cullen, Glenn E. and Austin, James H.: A note on the preparation of Dakin's hypochlorite solution. The solution is most stable at about $p_H = 8.5$. A method for attaining this point is described.—Proc. Soc. Exper. Biol. & Med. 1917, v. 15, p. 41–42.

Anon.: Daufresne suggests that Dakin's solution be stabilized by the addition of 0.005 gram of potassium permanganate per liter.—Chem. & Drug. 1918, v. 90, p. 184.

Becker, Irwin A.: A report of experiments in the preparation of Dakin's solution and its keeping qualities. Analytical data are given.—J. Am. Pharm. Assoc. 1918, v. 7, p. 971–972.

Noyes, E. R.: Directions are given for the preparation of Dakin's solution.—U. S. Naval Med. Bull. 1918, v. 12, p. 41–45.

McDonnell, W. N.: Notes on the preparation of Dakin's solution and the Carrel technique in the treatment of infected wounds.—U. S. Naval Med. Bull. 1918, v. 12, p. 45–53.

Pagel, C.: In the preparation of Dakin's solution, the use of H_3BO_3 and indicators in the neutralization of the excess of Na_2CO_3 may be avoided by adding a solution of $CaCl_2$ after mixing the $Ca(OCl)_2$ and Na_2CO_3 solutions.—Répert. pharm. 1918, v. 29, p. 349–350; Bull. sci. pharmacol. 1918, v. 25, part 2, p. 263–265.

Chevrier, D.: A description of a new method for preparing solution of hypochlorite intended for surgical use.—Bull. soc. pharm. Bordeaux, 1918, v. 56, p. 44–58.

Guildal, P., and Johannessen, L.: Some notes on the preparation and evaluation of Carel-Dakin's solution.—Arch. Pharm. Chem. 1918, v. 25, p. 70–76.

Anon.: Several formulas for the preparation of Dakin's solution and its modifications are given.—Am. Druggist, 1918, v. 66, No. 2, p. 40.

Rychlik, Emanuel: The removal of the excess of boric acid in Dakin's solution by means of sodium bisulphate is recommended.—Wien. klin. Wchnschr. 1917, v. 30, p. 1301–1302, through Chem. Zentralbl. 1918, v. 89, part 1, p. 39.

Mestrezat, W.: A description of a gasometric method for the determination of combined carbon dioxide in alkaline hypochlorite solutions. The essential feature of the method is the absorption of the liberated chlorine by means of oil of turpentine.—J. pharm. et chim. 1918, v. 17, p. 259–266; Ann. chim. analyt. 1918, v. 23, p. 451; Répert. pharm. 1918, v. 29, p. 253.

Philibert, M.: A criticism of the method of Mestrezat for the quantitative determination of free alkalies and alkaline carbonates in alkaline hypochlorite solutions.—J. pharm. et chim. 1918, v. 17, p. 260–272.

Kolthoff, I. M.: An investigation of the rate of deterioration of hypochlorite solutions on storing.—Pharm. Weekblad, 1918, v. 55, p. 1318–1324.

H. K. Mulford Co.: A report of a number of tests to determine the keeping qualities of concentrated Carrel-Dakin's solution. The derioration did not amount to more than 1.0 per cent over a period inging from 3 to 5 months.—Drug. Circ. 1918, v. 62, No. 1, p. 25.

Wischo, Fritz, and Freibergen, Franz: Concentrated Dakin soluons deteriorate to the extent of about 40 per cent in a month; soluons of 12.5 per cent NaOCl strength are comparatively stable, hile still more dilute solutions deteriorate only about 10 per cent ı two months.—Münch. med. Wchnschr. 1917, v. 64, p. 1528–1529, ırough J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 198.

Chevrier, D.: An investigation of the retrogression of Dakin's olution when in contact with caoutchouc. Rubber tubing in conıct with Dakin's solution caused a reduction in Cl titer of 8.5 and .7 per cent after 12 hours. A reduction of 33.3 per cent was obrved in the case of old rubber tubing.—Bull. soc. pharm. Bordeaux, 918, v. 56, p. 63–64; Schweiz. Apoth.-Ztg. 1918, v. 56, p. 498.

Taylor, K. P. A.: Notes on Dakin's solution, in which the keeping ualities are discussed, its use in the treatment of burns, and its ction on blood.—Therap. Gaz. 1918, v. 42, p. 687–690.

Éwe, G.: Sixteen lots of Dakin's solution examined contained in 00 mils 0.34 gm. to 0.512 gm. of chlorine, calculated as sodium ypochlorite. Five of them contained less than 0.45 gm. which is onsidered as the minimum standard.—Proc. Pennsylvania Pharm. ssoc. 1918, p. 103.

Chevrier, D.: An investigation of the action of Dakin's solution n catgut and silk. The solution causes catgut to swell and later to elatinize and dissolve. Silk undergoes similar changes. An abract.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 474.

Githens, T. S., and Meltzer, S. J.: Some notes on the power of akin's sodium hypochlorite solution to prevent blood clotting.—roc. Soc. Exper. Biol. & Med. 1918, v. 15, p. 127–128.

McCartney, G. E., and Mewburn, F. H. H.: A description of the chnique of the Carrel-Dakin treatment.—Brit. M. J. 1918, v. 1, p. 70–171.

Bazin: An experimental investigation of the antiseptic power of incent's boro-hypochlorite mixture.—Compt. rend. soc. biol. 1918, . 81, p. 122–124.

Cazin, Maurice, and Krongold-Vinaver, S.: Studies on the use of ntiseptics in the treatment of infected wounds, with special refernce to solution of sodium hypochlorite.—Compt. rend. soc. biol. 918, v. 81, p. 1214–1217.

Mestrezat, W.: Notes on the use of chlorinated solutions of soda nd alum in the continuous irrigation of wounds.—Compt. rend. oc. biol. 1918, v. 81, p. 91–93.

Weissenbach, R. J., and Mestrezat, W.: A comparative study of he antiseptic power of acid and alkaline hypochlorite solutions shows that the former has double the antiseptic power of the latter.—Compt. rend. soc. biol. 1918, v. 81, p. 93–96.

LIQUOR SODII CHLORIDI PHYSIOLOGICUS.

Gerhsenfeld, Louis: A discussion of the history, preparation, and use of physiological salt solution.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 223–227.

LIQUOR SODII HYDROXIDI.

Terry, Robert W.: Of 4 samples of solution of sodium hydroxide analyzed, 2 samples were above the strength required by the U. S. P. IX and 2 were below.—Proc. Ohio Pharm. Assoc. 1918, p. 135.

LIQUOR ZINCI CHLORIDI.

Broeksmit, T. C. N.: In order to avoid impurities, solution of zinc chloride is best prepared by thoroughly mixing 21.1 grams of zinc sulphate with 17.9 grams of barium chloride (both finely powdered) and adding 100 cubic centimeters of water. Upon filtration, a solution is obtained containing approximately 8 per cent of chloride free from basic salts.—Pharm. Weekblad. 1918, v. 55, p. 1409–1410.

De G. Peacock, J. C. and Bertha L.: The separation of basic zinc chloride and the liberation of hydrochloric acid in solutions of zinc chloride may be prevented by the addition of boric acid or ammonium chloride in the proper proportions.—J. Am. Pharm. Assoc. 1918, v. 7, p. 689.

LITHII BROMIDUM.

Kellner, Georg: The melting point of anhydrous lithium bromide is given as 552° C.—Ztschr. anorg. Chem. 1917, v. 99, p. 173–183. through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 469.

LITHII CARBONAS.

Seyler, Clarence A., and Lloyd, Percy V.: Researches on the carbonates. III. A study of the carbonates of lithium, calcium, and magnesium.—J. Chem. Soc. Lond. 1917, v. 111, p. 994–1001.

LUPULINUM, N. F.

Anderson, George A.: Three samples of lupulin examined showed an ash content of 24 per cent, 23 per cent, and 16 per cent, respectively. The National Formulary allows only 16 per cent of ash in lupulin.—Proc. N. W. D. A. 1918, p. 240.

Engelhardt, H.: Of 6 shipments of lupulin examined, 2 were rejected, yielding 40 per cent of ash and being soluble in ether only to the extent of 44.1 per cent.—Proc. Maryland Pharm. Assoc. 1918, p. 83.

LYCOPODIUM.

Roberts, J. G.: One lot of lycopodium examined was of U. S. P. quality except that it yielded an excess of ash.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

MACIS, N. F.

LaWall, C. H.: Of 10 samples of mace examined, 4 were slightly bove the 30 per cent maximum figure for nonvolatile ether extract.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

MAGMA BISMUTHI.

Snapp, E. L.: Of 4 samples of milk of bismuth examined, 1 assayed ess than 5.2 per cent Bi_2O_3, which is required by the U. S. P.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

MAGMA MAGNESIÆ.

Utech, P. H.: Milk of magnesia made by the formula of the N. F. II is stated to be an excellent product. It can be made at a cost of bout 40 cents per gallon.—Apothecary, 1918, v. 30, No. 8, p. 24.

Terry, Robert W.: The $Mg(OH)_2$ content of 7 samples of milk of magnesium assayed varied from 5.21 to 9.79 per cent.—Proc. Ohio Pharm. Assoc. 1918, p. 137.

Snapp, E. L.: Of 13 samples of milk of magnesia examined, 9 were ejected.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

MAGNESII CARBONAS.

Utech, P. H.: If allowed to remain in close contact with such romatic substances as asafetida, camphor, naphthalene, etc., magnesium carbonate absorbs the odors of these substances and is rendered unfit for pharmaceutical uses.—Apothecary, 1918, v. 30, No. 8, p. 24.

Seyler, Clarence A., and Lloyd, Percy V.: Researches on the carbonates. III. A study of the carbonate of lithium, calcium, and magnesium.—J. Chem. Soc. Lond. 1917, v. 111, p. 994–1001.

Macri, V.: A report of experimental work on the analysis of magnesite.—Boll. chim. farm. 1918, v. 57, p. 301–302.

Roberts, J. G.: In two lots of magnesium carbonate examined here was an excess of 0.44 per cent and 0.14 per cent of calcium alculated as calcium oxide.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

LaWall, C. H.: Of 5 samples of magnesium carbonate examined, 2 ontained over 5 per cent of $CaCO_3$ and over 0.25 per cent Fe_2O_3.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

MAGNESII OXIDUM.

Astruc, A.: Studies on the assay of magnesium oxide, with special reference to its identification and the estimation of the impurities contained therein.—Farm. Españ. 1918, v. 50, p. 503–505, 520–521, 551–532, 566–568.

Campbell, Edward De Mille: Data are given to show the effect of burning on the rate of hydration of magnesium oxide.—J. Ind. & Eng. Chem. 1918, v. 10, p. 595–596.

Anderson, George A.: One shipment of calcined magnesia examined contained an excess of calcium.—Proc. N. W. D. A. 1918, p. 230.

MAGNESII OXIDUM PONDEROSUM.

Ransford-Gay, St. Claire: Attention is called to the efficacy of heavy magnesium carbonate as a cathartic for general use and in obstinate constipation.—Proc. Pennsylvania Pharm. Assoc. 1918, v. 41, p. 232.

MAGNESII SULPHAS.

Kohn-Abrest, E.: A table is given comparing the amount of arsenic present in so-called pure magnesium sulphate and other common chemicals for the years 1916 and 1917. The Marsh apparatus and methods for determining arsenic are also described.—Rev. prod. chim. 1918, v. 21, p. 199–202 and 214–216.

Anon.: Samples of epsom salts examined in England were found to contain an excess of arsenic and lead.—Brit. Food J. 1918, v. 20, p. 18, 54, 66.

Diner, Jacob: A comprehensive review of the pharmacology of magnesium sulphate. A bibliography is appended.—J. Am. Pharm. Assoc. 1918, v. 7, p. 150–159.

Martinez, F. F.: A 1 in 4 solution of magnesium sulphate injected in doses of 2 cubic centimeters into the arm or buttock daily for 6 to 10 days is recommended as a cure for constipation.—Med. Iber. 1918, v. 2, p. 369, through J. Am. M. Assoc. 1918, v. 71, p. 413.

Meltzer, S. J.: During the course of investigations on the action of magnesium sulphate on the nervous system it was found that a concentrated solution had a very favorable effect when applied to scalds and burns.—J. Pharmacol. & Exper. Therap. 1918, v. 12, p. 211–214.

Morison, Albert E.: A report of cases in which magnesium sulphate was successfully used as an antiseptic in wound treatment.—Brit. M. J. 1918, v. 1, p. 342–344.

Auer, J., and Meltzer, S. J.: Magnesium sulphate carefully administered intravenously in 6 per cent solution is capable of abolishng all tetanic symptoms in dogs receiving tetanus toxin subcutaeously.—Proc. Soc. Exper. Biol. Med. 1917, v. 15, p. 36–37.

Pastore, R.: Notes on the use of magnesium sulphate in the treatment of chorea, with a review of the literature and a report of ases.—Pediatria, 1918, v. 26, p. 577, through J. Am. M. Assoc. 1918, . 71, p. 2029.

Gates, Frederick L., and Meltzer, S. J.: Experiments conducted y the authors show that a subminimum dose of magnesium sulphate s capable of saving an animal from a surely fatal dose of sodium xalate.—J. Pharmacol. 1917, v. 9, p. 353–354.

MANGANI DIOXIDUM PRÆCIPITATUM.

Ewe, G.: One lot of precipitated manganese dioxide examined ontained 2.32 per cent of insoluble matter. The U. S. P. allows nly 0.2 per cent.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

Engelhardt, H.: Two shipments of manganese dioxide assayed nly 70.7 and 76.8 per cent, respectively, of MnO_2.—Proc. Maryland harm. Assoc. 1918, p. 81.

MANNA.

Raimondi, Vincenzo: An attempt to classify Italian mannas on he basis of the terminology employed in the centers of production nd exportation. Analytical data showing the mannitol content of arious samples of manna taken at various periods in the different enters of production are also given.—Boll. chim. farm. 1918, v. 57, . 61–63. For statistics on the production of manna, see ibid, p. 383.

MATICO, N. F.

Ewing, C. O., and Clevenger, J. F.: A note on the use of *Eupaorium glutinosum* Lam. as an adulterant of matico.—J. Am. Pharm. Assoc. 1918, v. 7, p. 510–512.

MATRICARIA.

Lea, E. J.: Examinations of importations of "chamomile lowers" (*Matricaria chamomilla* L.) have disclosed that in some nstances the flowers of dog fennel (*Anthemis cotula* L.) have been ubstituted in amounts up to 25 per cent.—Bull. California Bd. Health, 1918, p. 564.

Ballard, C. W.: *Anthemis nobilis* is referred to as a possible adulerant of matricaria. The chief differences and similarities in wild nthemis, cultivated anthemis, and matricaria are tabulated.—J. Am. Pharm. Assoc. 1918, v. 7, p. 952–954.

Ross, H.: A note on *Matricaria suaveolens* Buchen, *M. discoidea* D. C., and the possibility of its being used as a substitute for German chamomile.—Heil. und Gewürzpfl. 1917, p. 51, through Pharm. Zentralh. 1917, v. 58, p. 499–500.

MEL.

Anon.: The Spanish production of honey is estimated at 13,000 tons annually.—Chem. & Drug. 1918, v. 90, p. 1016.

Crocco, Cleofé: A contribution to the study of honey. An historical, chemical, and pharmaceutical study, including a discussion of organoleptic, microscopic, saccharimetric, and biologic tests.—Rev. Farm. 1918, v. 56, p. 131, through Ann. soc. quim. Argentina, 1918, v. 6, p. 270.

Anon.: Some notes on the preservation of honey.—Pract. Drug. 1918, v. 36, No. 1, p. 22.

Stout, Henry: The Ph. Brit. requirement that the solution of the ash of honey in distilled water should not be alkaline to litmus is stated to be an error. In all of the samples of honey examined the solution of the ash was found to be distinctly alkaline.—Pharm. J. 1918, v. 100, p. 147 and 167.

Lajoux, H., and Ronnet, L.: An analytical table is given for saccharine food products, syrups, jams, and honeys.—J. pharm. et chim. 1917, v. 16, p. 199–204.

Raffaelli, Alfredo O.: Analytical data obtained in the examination of Argentine honeys are presented.—Ann. soc. quim. Argentina, 1918, v. 6, p. 429–441.

Berger, Fr.: Notes on bee's honey and wax and their use as therapeutic agents.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 350–353, 366–371, 382–384, 395–397, 409–411, 436–439.

Horst, F. W.: Artificial honey gives a reddish-yellow color with sodium arsenite, which may be used as a means of identification.—Ztschr. Unters. Nahr.- u. Genussm. 1917, v. 34, p. 164, through Pharm. Weekblad, 1918, v. 55, p. 220.

Anon.: Honey is suggested as an ointment base to replace lard. It is not adapted to ointments containing copper or silver salts.—Chem. & Drug. 1918, v. 90, p. 829.

Dutcher, R. A. and Collatz, F. A.: Some observations on the curative properties of honey, nectar and corn pollen in avian polyneuritis.—J. Biol. Chem. 1918, v. 36, p. 551–555.

MENTHA VIRIDIS.

Rabak, Frank: Data are reported relative to the influence of time of harvesting, drying, and freezing on the yield and odorous constituents of spearmint oil.—J. Ind. & Eng. Chem. 1918, v. 10, p. 275–279.

Editorial: Botanical and medicinal data relative to spearmint are given.—Eclectic M. J. 1918, v. 78, p. 44–45.

MENTHOL.

Anon.: During the year 1917 the Japanese exports of menthol amounted to 251,210 kin.—Chem. & Drug. 1918, v. 90, p. 237.

Enz, K.: The melting point of menthol has not been accurately determined to date. The melting point given in the German pharmacopœia is not always observed in the commercial product.—Südd. Apoth.-Ztg. 1918, p. 208 through Pharm. Zentralh. 1918, v. 59, p. 352.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the Ph. Germ. specifications for the melting point of menthol be changed to read 42° to 44° C.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 378.

Anon.: Notes on the poisonous symptoms produced by the ingestion of 8 to 9 grams of menthol.—D.-A. Apoth.-Ztg. 1918, v. 39, p. 4.

METHYLIS SALICYLAS.

Deutsche Pharmaceutische Gesellschaft: Recommendations for the monograph on methyl salicylate to be included in the new edition of the Ph. Germ. are presented.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 378.

Astruc, A.: The author's method for the evaluation of aspirin described in Journal de Pharmacie et de Chimie, 1913, v. 8, p. 5, is stated to be equally suitable for the determination of the methyl and ethyl esters of salicylic acid.—J. pharm. et chim. 1918, v. 17, p. 386–388.

Semmler, F. W. et al.: Betulol is a constituent of birch bud oil and is stated to be a bicycle sesquiterpene alcohol of the formula $C_{15}H_{24}O$.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 417–424.

MISTURA RHEI ET SODÆ.

Arny, H. V. and Breivogel, Philip: A method for the assay of glycerin in the mixture of rhubarb and soda is described, and results obtained with the use of this method are tabulated.—Proc. New York Pharm. Assoc. 1918, p. 270–273; Am. Drug. 1918, v. 66, p. 276–277.

MORPHINA.

Schelenz, Hermann: An historical paper written in honor of the one hundredth anniversary of the discovery of morphine by Sertürner.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 275–300.

Anon.: Japan imported morphine during the years 1915 to 1917 as follows: 358,543 oz., 558,812 oz., and 600,229 oz.—Chem. & Drug. 1918, v. 90, p. 391.

Anon.: The morphine imports of the United Kingdom for the years 1913 to 1917 are given as 52 oz., 3,306 oz., 242,295 oz., 48,158 oz., and none. The exports were 406,154 oz., 504,020 oz., 295,572 oz., 225,611 oz., and 124,593 oz.—Chem. & Drug. 1918, v. 90, p. 921.

Faltis, Franz: The chemical constitution of morphine.—Ztschr allgem. österr. Apoth.-Ver. 1917, v. 55, p. 291–294, 297–299, 313–316, through Chem. Zentralbl. 1918, v. 89, part 1, p. 631.

Kaufmann, Adolf and Dürst, Niclaus: A report of researches to determine the constitution of the morphine alkaloids. II. The synthesis of isoquinoline derivatives.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1630–1637, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 122–123.

Heiduschka, A., and Faul, M.: A comparison of the author's results with those of Frerich's on the quantitative determination of morphine and on the solubility of morphine in ammonia water.—Arch. Pharm. 1918, v. 256, p. 122; Schweiz. Apoth.-Ztg. 1918, v. 56, p. 53–55.

Hill, C. A.: The use of a Gooch crucible fitted with a filter paper is recommended for collecting the precipitated morphine obtained in the B. P. method for the determination of this alkaloid in opium. The precipitate is washed with morphinated water in the usual way.—Analyst, 1918, v. 43, p. 214.

Tingle, A.: Methods are described for the determination of morphine in opium or mixtures containing opium, and in complex mixtures when it exists as a simple salt.—Am. J. Pharm. 1918, v. 90, p. 689–706, 788–795 and 851.

Marcelet, Henri: A report of an investigation to determine the localization of morphine in the body after acute and chronic poisoning.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 292–295.

Palet, Luciano P. J.: A description of a rapid method for the determination of morphine in the toxicological analysis of the viscera.—Ann. soc. quim. Argentina, 1918, v. 6, p. 349–351.

Guetterink and von Ryn: Notes on the identification of morphine in the cadaver. The various reagents which have been employed for this purpose are discussed. The authors were able to identify morphine in the cadaver two and a half years after death by the method which they employed.—Vierteljahreschr. ger. Med. v. 50, No. 1, through Pharm. Zentralh. 1917, v. 58, p. 549.

Ross, Ellison L.: A report of experiments to determine whether morphine increases or decreases the unbalanced physiological condition produced by ether anesthesia, the variations in blood dextrose being taken as indicator.—J. Biol. Chem. 1918, v. 34, p. 335–342.

Krishnaswany, C. S.: A septicemia characteristic of morphine addicts due to a bacillus not yet classified is described. The characteristics of the organism would place it between the glanders baillus and the bacillus of tuberculosis.—Indian Med. Rec. 1917, v. 37, p. 123-126 and 141-143, through Abstr. Bact. 1918, v. 2, p. 22.

van Leersum, E. C.: Besides its action as a narcotic morphine has a decided direct action on the center for tonus of the parasympathetic system.—Nederlandsch Tijdschrift voor Geneeskunde, Amsterdam, 1918, v. 1, p. 1575, through J. Am. M. Assoc. 1918, v. 71, p. 862.

Osnato, Michael: A report of a case of abnormal reflexes caused by morphine poisoning in a tabetic.—J. Am. M. Assoc. 1918, v. 70, p. 1815–1816.

Dott, D. B.: Data relative to the difference in the solubility of amorphous and crystalline morphine bimeconate and bisulphite are given.—Pharm. J. 1917, v. 99, p. 282.

Rakshit, Jitendra Nath.: The preparation and properties of calcium morphinate are described in a paper dealing with metallic derivatives of alkaloids.—J. Chem. Soc. Lond. 1918, v. 113, p. 466–471.

MORPHINÆ HYDROCHLORIDUM.

Schafer, K., and Stich, C.: A report of experiments to determine what changes, if any, take place in solutions of morphine hydrochloride when sterilized in ampoules. The addition of a small quanity of hydrochloric acid (0.5 to 1 cubic centimeter of N/10 hydrochloric acid solution to each 100 cubic centimeters of morphine solution) to neutralize any alkalinity of the class in the ampoules is recommended.—Pharm. Ztg. 1917, v. 62, p. 311.

MOSCHUS.

Hanson, G. C.: An account of the musk industry of China.—Com. Rep. 1918, No. 10, p. 156–158; Am. J. Pharm. 1918, v. 90, p. 94–197.

MUCILAGENES.

Anon.: A mucilage having a greater viscosity than that of acacia is prepared by boiling seaweed with a solution of sodium carbonate nd treating the filtrate with sulphuric acid.—Chem. & Drug. 1918, v. 90, p. 283.

Anon.: A note on the preparation of mucilage of salep.—Pharm. Centralh. 1918, p. 301, through Schweiz. Apoth.-Ztg. 1919, v. 56. p. 142.

MUCILAGO ACACIÆ.

Deutsche Pharmaceutische Gesellschaft: The addition of 6 per ent of alcohol, or the use of equal parts of distilled water and lime water, in the preparation of mucilage of acacia is recommended for improving its keeping qualities.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 379.

Anon.: To render mucilage of acacia more tenacious add 2 per cent of glue.—Chem. & Drug. 1918, v. 90, p. 269.

MYRRHA.

Christensen, F. V.: A thesis dealing with the preparation and preservation of powdered myrrh. The bromine method of the Danish pharmacopœia was used in testing the samples.—Arch. Pharm. Chem. 1918, v. 25, p. 230-234, 245–253. See also Henry Loft, p. 265–267.

Southard, E.: Myrrh is among the Arabian products mentioned as being imported through the port of Aden.—Pharm. Era, 1918, v. 51, p. 234.

Todd, A. R.: Two samples of gum myrrh examined proved to be of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

NITROGENII MONOXIDUM.

Anon.: The toxic substances in unwashed nitrogen monoxide gas are stated to consist of hydrazines or hydroxylamines. These can be removed by passing the gas through concentrated sulphuric acid.—Apothecary, 1918, v. 30, No. 4, p. 48.

NUX VOMICA.

Hill, A. W.: An exhaustive study of known material of the *Strychnos* genus. The results of the examination of 92 species are reported. Attention is directed to the variability of *Strychnos nux vomica* and the desirability of examining authentic seeds of the different varieties to determine which are the richest in strychnine is pointed out. Kew Bull. 1917, Nos. 4 and 5, through Pharm. J. 1918, v. 100, p. 299; J. pharm. et chim. 1918, v. 17, p. 49–51.

Tschirch, A.: An historical-linguistical explanation of the origin of the use of the German synonym (Brechnüsse) for nux vomica.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 3–7.

Schelenz, Hermann: A reply to A. Tschirch relative to the origin of the name "nux vomica" for Semen strychni.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 245–248.

Tunmann, O.: In the examination of several hundred seeds of nux vomica, the presence of numerous crystals of chlorogenic acid was observed in one case.—Pharm. Post, 1918, v. 51, p. 341–342, through Chem. Zentralbl. 1918, v. 89, part 2, p. 401–402.

Schaefer, Hugo H.: From investigations, it is concluded that it is desirable that the Pharmacopœia require a definite standard for total alkaloids in nux vomica as well as for strychnine alone. It is stated that nux vomica containing 2.5 per cent of total alkaloids and 1.25 per cent of strychnine can be obtained on the market without difficulty.—Am. J. Pharm. 1918, v. 90, p. 633-635; Proc. New Jersey Pharm. Assoc. 1918, p. 50-51.

Lefeldt, M.: It is recommended that the method of Fromme for the alkaloidal assay of nux vomica given in the Geschäft's-Bericht of Caesar and Loretz for 1906 and 1907 be adopted for the new German pharmacopœia.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 182.

Wöber, A.: A modification of Dowzard's colorimetric method for estimating brucine in the presence of strychnine. Dowzard's method may be rendered trustworthy by using a mixture of equal volumes of strong nitric acid and 20 per cent sulphuric acid as the reagent, and adding a small amount of a saturated aqueous solution of potassium chlorate immediately after the reaction.—Ztschr. angew. Chem. 1918, v. 31, part 1, p. 124, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 339.

Leuchs, Hermann: A report of researches on the strychnos alkaloids. XXIV. Cause of the violet color reaction of cacotheline and related nitro compounds of the brucine series.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 1375–1389.

Hankey, Wm. T.: The alkaloidal content of four samples of nux vomica assayed varied from 2.40 to 2.548 per cent. Two of the samples yielded 1.4 and 1.75 per cent ash, respectively.—Proc. Ohio Pharm. Assoc. 1918, p. 132.

Roberts, J. G.: Two lots of nux vomica examined contained 2.34 per cent and 2.22 per cent, respectively, of alkaloids, which is below the U. S. P. standard of not less than 2.5 per cent alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 105.

OLEORESINA ASPIDII.

Glücksmann, C.: Two tests for the identification of the oleoresin of aspidium are described. One of the tests is based on the color produced with solution of ferric chloride and the other on the behavior of the oleoresin toward fuming hydrochloric acid.—Pharm. Post, 1916, v. 49, p. 911, through Pharm. Zentralh. 1917, v. 58, p. 215.

Sollmann, Torald: A study of the physiological methods for standardizing anthelmintics. A standard oleoresin of male fern should kill earth worms in water in a concentration of 0.002 to 0.003 per cent.—Rep. Therap. Res. Com. 1918, v. 7, p. 108–112.

Perrin: Methods of determining crude filicin and filicic acid in oleoresin of male fern are described. The results of analyses are given.—Ann. chim. analyt. 1918, v. 23, p. 55–57.

Deutsche Pharmaceutische Gesellschaft: It is recommended that a method for the determination of crude filicin be introduced in the German pharmacopeia. The standard for crude filicin should be not less than 20 per cent.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 200-201.

Anon.: It is impossible at the present time to prepare an oleoresin of aspidium which assays 35 per cent of crude filicin. The oleoresin prepared from the year's crop of male fern assayed only 20 per cent of crude filicin. Mitt. Caesar and Loretz, through Pharm. Zentralh. 1918, v. 59, p. 28.

Engelhardt, H.: It is stated that oleoresin of male fern is practically unobtainable. A few small lots examined had to be purified on account of assaying less than 27 per cent of crude filicin, the requirements for good oleoresin of male fern.—Proc. Maryland Pharm. Assoc. 1918, p. 83.

Anon.: A number of formulas for rendering the oleoresin of male fern suitable for administration are given and discussed.—Boll. chim. farm. 1918, v. 57, p. 57–59.

Hall, Maurice C., and Foster, Winthrop D.: An experimental study of the efficacy of some anthelmintics, including oleoresin of aspidium.—J. Agric. Res. 1918, v. 12, p. 397–447.

OLEA PINGUA.

Herbig, W.: Annual review of the work on fats, oils, and waxes for the year 1916.—Seifenfabr. 1917, v. 37, p. 477–479, 505–507, 577–578, 602–603, 628–630; 1918, v. 38, p. 27–29 and 51–52, through Am. Perf. 1918, v. 13, p. 69–70, 103–104, 138–139, 179–180, 211–212, 245–246, 279–280.

Moore, Robert J., and Egloff, Gustav: An account of the production of fats and fatty acids from petroleum.—Am. Perf. 1918, v. 13, p. 176–178.

Schuck, Walter P.: A description of a process for deodorizing fatty oils by means of the action of hydrogen.—Am. Perf. 1918, v. 13, p. 277–278.

Astruc, A., and Cambe, J.: The use of a mixture of equal parts of ether and alcohol in place of alcohol alone is stated to be an improvement in the authors' method for the purification of oils.—J. pharm. et chim. 1917, v. 16, p. 241–243.

George, B. L.: A method for removing water from oil consists of agitation with a small amount of gum tragacanth.—Chem. Analyst, 1918, No. 24, p. 15.

Ubbelohde, L., and Roederer, W.: A description of the process of splitting fats with sulpho-aromatic acids.—Seifenfabr. 1918, v. 38, Aug. 20, through Am. Perf. 1918, v. 13, p. 311–312, 341–344.

Davidsohn, J., and Wrage, W.: Data relative to the solubility of oils in alcohol are presented.—D.-A. Apoth.-Ztg. 1918, v. 39, p. 122.

Sammet, C. F.: A procedure is outlined for the relative determination of the viscosity of oils, based on the time of absorption of an oil when dropped upon blotting paper under uniform conditions.—J. Ind. & Eng. Chem. 1918, v. 10, p. 632.

Fryer, P. J., and Weston, F. E.: A report of an investigation to determine the relative dispersion of oils, with a view to discovering if this figure would yield any information of discriminative value.—Analyst, 1918, v. 43, p. 311–317.

Grunmach, Leo, and Bein, Willie: Data obtained in the determination of the surface tension of oils by means of a capillary plate apparatus are presented.—Chem. Zentralbl. 1918, v. 89, p. 875.

Kober, P. A.: A brief discussion of the application of the nephelometer to the determination of oils, fats, etc.—J. Soc. Chem. Ind. 1918, v. 37, p. 75–76T.

Anon.: Descriptions of tentative standard methods for the sampling and analysis of commercial fats and oils adopted by the Committee on the Analysis of Commercial Fats and Oils of the Division of Industrial Chemists and Chemical Engineers of the American Chemical Society.—Am. Perf. 1918, v. 13, p. 26–30.

Jacobsen, J.: A pipette for use in the titration of the acidity of oils is described. Illustrated.—J. Ind. & Eng. Chem. 1918, v. 10, p. 633.

Bolton, E. R., and Revis, C.: A method is described for the estimation of moisture and total fatty matter in "acid oils" and soap stocks.—Analyst, 1918, v. 43, p. 158–161.

Hildt, E.: A description of a modification of the Wijs solution for the determination of iodine numbers. Pure dry chlorine is passed into carbon tetrachloride containing 3 to 4 per cent of iodine in solution and suspension, thus obtaining a solution of ICl titrating 6 to 8 per cent.—Rev. prod. chim. 1918, v. 21, p. 254–255.

Kelber, C., and Rheinheimer, H.: A comparison of the bromite-bromate method and the methods of Hübl and of Wijs for the determination of the iodine value of fats and oils. The Wijs method is stated to be the most satisfactory on account of the stability of the solution and the short time necessary to complete the determination.—Arch. Pharm. 1917, v. 255, p. 417–424, through Analyst, 1918, v. 43, p. 90.

Preschner, J.: A description and discussion of the method of Bondzynski and Rufi for the determination of the Reichert-Meissl number.—Ztschr. Unters. Nahr.- u. Genussm. 1918, v. 36, p. 67–69.

Schoorl, N.: The expression of saponification number, acid number, ester number, etc., of fat in milligrams of KOH, etc., is irrational and should be replaced by a system of notation giving the number of cubic centimeters of normal alkali necessary to saponify 100 grams of fat or to neutralize 100 grams of free fatty acid.—Chem. Weekblad, 1918, v. 15, p. 715–716.

Salkowski, E.: A study of the changes in fats due to rancidity.—Ztschr. Unters. Nahr.—u. Genussm. 1917, v. 34, p. 305–318, through Chem. Zentralbl. 1918, v. 89, part 1, p. 125–126.

Prescher, J.: A note on the availability of the oxidase reaction for the detection of tallowy or rancid fats. The test is described in detail.—Ztschr. Unters. Nahr.- u. Genussm. 1918, v. 36, p. 162–166.

Kerr, R. H.: A discussion of the reaction of Kreis and the "oxidizability value" of Issoglio in relation to their application in the detection of the rancidity of fats.—J. Ind. & Eng. Chem. 1918, v. 10, p. 471–475.

Fryer, P. J., and Weston, F. E.: A report of an investigation which had for its object a study of the causes for discrepancies in the Valenti test for fixed oils and the means whereby uniform figures might be obtained, if possible.—Analyst. 1918, v. 43, p. 3–20.

Stewart, Alan W.: A discussion of the Valenta and Crismer test for fats.—J. State Med. 1918, v. 26, p. 312–315, through Chem. Abstr. 1918, v. 12, p. 2629.

Prescher, J.: The true fat content of a material is best ascertained from determinations of the free fatty acids, the total fatty acids, and the saponification value.—Ztschr. Unters. Nahr.- u. Genussm. 1918, v. 36, p. 71–73, through J. Soc. Chem. Ind. 1918, v. 37, p. 741A.

Kraus, Ludwig: A method for the determination of salicylic acid esters in fatty oils is based on the difference in solubility of the alkaline earth salts of salicylic acid and of the fatty acids.—Apoth.-Ztg. 1918, v. 33, p. 20.

Bull., H.: An alkalimetric method for the determination of glycerin in fatty oils is described.—Chem. Ztg. 1916, v. 40, p. 690, through Pharm. Zentralh. 1918, v. 59, p. 55.

Erban, Franz: An account of methods used for the determination of ricinic acid in oil preparations.—Seifenfabr. 1918, v. 38, p. 353–355, 377–378.

Utz: An investigation of methods for distinguishing between vegetable and animal fats. The methods of Soltsien and of Bellier are recommended as being most suitable for pharmaceutical purposes.—Chem. Umschau Fette, Oele, Wachse, Harze, 1918, v. 25, p. 13–14, through Chem. Abstr. 1918, v. 12, p. 2699.

Marcusson, J.: An investigation of methods for the detection of vegetable oils in animal fats. The method of Marcusson and Schilling was found to be preferable to that of Klostermann or that of Kühn and Wewerinke. An abstract.—Chem. Zentralbl. 1918, v. 2, p. 152.

Albrecht, E. W.: An account of the manufacture of pumpkin-seed oil.—Ztschr. angew. Chem. 1918, v. 31, part 1, p. 132, through J. Soc. Chem. Ind. 1918, v. 37, p. 474A.

Anon.: A report of a study of oils extracted from some new oil seeds of Sierra Leone.—Bull. Imp. Inst. 1918, v. 16, p. 35–40.

Fleissig, P.: A table is given showing the most important reactions and properties of the fats and oils official in the Ph. Helv.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 216–221.

Klimont, J.: The physical and chemical constants of some wartime vegetable oils, viz: corn oil, pumpkin-seed oil, walnut oil, hazelnut oil, tobacco-seed oil, raspberry-seed oil, poppy oil, and sunflower oil.—Pharm. Post, 1918, v. 51, p. 561–562, through Pharm. Zentralh. 1918, v. 59, p. 339.

Chapman, A. Chaston: Data relative to the physical and chemical constants of dog-fish liver oil are given.—Chem. News, Lond. 1918, v. 117, p. 367–368.

Maxwell, Harold L.: A report of a chemical examination of the oil obtained from cherry pits. The oil was found to be essentially the same as expressed almond oil.—Chem. News, Lond. 1918, v. 117, p. 122–124.

Raynes, E. G.: The iodine values of various mustard oils were found to be as follows: Expressed mustard oil, 119.6–121.0; extracted black mustard oil, 114.4; extracted white mustard oil, 104.7–108.6. The values recorded by certain authors appear to be too low.—Analyst, 1918, v. 43, p. 216–217; J. Soc. Chem. Ind. 1918, v. 37, p. 442A.

Zellner, Julius: Data relative to the chemical constants of the fatty oil obtained from *Sambucus racemosa* L. are given.—Monatsh. Chem. 1918, v. 39, p. 87–94.

Heiduschka, A., and Zeileis, A.: Data obtained in the determination of the physical and chemical constants of the oil obtained from horse chestnuts are presented.—Ztschr. Unters. Nahr.-u. Genussm. 1917, v. 33, p. 446.

Jansen, B. C. P.: A report of investigations to determine the amount of soluble vitamines in cocoanut oil. An abstract.—Chem. Weekblad, 1918, v. 15, p. 1574.

Windaus, A., and Rahlen, Erik: A contribution to our knowledge of the chemistry of sitosterins.—Ztschr. physiol. Chem. 1918, v. 101, p. 223–235, through Chem. Zentralbl. 1918, v. 89, part 2, 273.

Holmes, A. D.: A report of experiments to determine the digestibility of some seed oils, corn oil, soy-bean oil, sunflower-seed oil, Japanese mustard-seed oil, rapeseed oil, and charlock oil.—Bull. U. S. Dept. Agric. 1918, No. 687, p. 1–20.

LeMoignic, E., and Sézary, A.: Intravenous injections of vegetable oils. A report of an experimental study.—Compt. rend. soc. biol. 1918, v. 81, p. 590–592.

OLEUM AMYGDALÆ EXPRESSUM.

Lefeldt, M.: In the elaidic test the Ph. Germ. states that the oil solidifies in two to six hours when kept at a temperature of about 10° C. This statement is said to be contrary to the fact, as solidification does not usually occur until 10 or 12 hours have passed. At ordinary temperatures it requires two days for the oil to solidify.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 175–177.

OIL, CHAULMOOGRA (NONOFFICIAL).

Hernandez, J. G.: Experimental data relative to the value of chaulmoogra oil in the treatment of tuberculosis are presented.—Gaceta Medica de Caracas, Venezuela, 1918, v. 25, p. 127, through J. Am. M. Assoc. 1918, v. 71, p. 1177.

OLEUM GOSSYPII SEMINIS.

Phillips, C. O.: U. S. patent No. 1,278,073 describes the extraction of oil from cotton seed. The cottonseed meats are prepared for extraction of the oil by mixing each ton of seed with about 3 gallons of an aqueous solution containing 0.1 pound of sodium bicarbonate to the gallon and cooking. The oil is then expressed.—Chem. Abstr. 1918, v. 12, p. 2456.

Gastaldi, E.: It is pointed out that the Halphen reaction gives a positive result with all vegetable oils if the temperature is allowed to go above 155°. A modification of the method which is not open to this objection is described.—Chem. Umschau, 1917, p. 90, through Pharm. Zentralh. 1917, v. 58, p. 562.

Smalley, F. N.: A report of a color investigation of cottonseed oil and cottonseed meal.—Cotton Oil Press, 1918, v. 2, No. 3, p. 42–43, through Chem. Abstr. 1918, v. 12, p. 2254.

OLEUM LINI.

Rabak, Frank: Experimental data are presented showing the influence of the geographical source and variety of flax on linseed oil.—Bull. U. S. Dept. Agric. 1918, No. 655, p. 1–16.

Holden, G. E., and Radcliffe, L. G.: A study of the oxidation of linseed oil. The conclusions arrived at through a series of exhaustive experiments are presented.—J. Soc. Dyers Colourists, 1918, v. 34, p. 138–148, through Chem. Abstr. 1918, v. 12, p. 2695.

Bolton, E. R.: A review of a monograph by J. Newton Friend entitled *The Chemistry of Linseed Oil.*—Analyst, 1918, v. 43, p. 186.

McLaughlin, Allan J.: One sample of linseed oil examined proved to be of U. S. P. quality.—Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.

Todd, A. R.: Of six samples of linseed oil examined, four were not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

OLEUM MORRHUÆ.

Anon.: Lofoten production of cod liver oil. A report gives the yield of medicinal oil and of livers for raw oil for the past 20 years.—Chem. & Drug. 1918, v. 90, p. 397.

Anon.: The exports of cod liver oil from Norway for 1917 amounted to 23,299 hectoliters.—Chem. & Drug. 1918, v. 90, p. 774.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the new edition of the Ph. Germ. fix the limits of the iodine number of cod liver oil at 150 to 175. The test for the detection of nondrying oils is also criticized.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 204–206.

Anderson, George A.: Norwegian cod liver oil has practically been unobtainable in this country during the last year. Supplies of Newfoundland cod liver oil have been very plentiful, but of a very poor quality. The oil possesses a high content of fatty acids and sometimes a strong odor and taste.--Proc. N. W. D. A. 1918, p. 240.

McMillan, A.: A great improvement in the quality of Newfoundland cod liver oil has been effected through the Government's action in sending a Norwegian expert to instruct the refiners in the methods of extracting the finest oil. It is claimed that the Newfoundland oil is now equal to the best Norwegian oil.—J. Ind. & Eng. Chem. 1918, v. 10, p. 307.

Anderson, George A.: One shipment of cod liver oil examined consisted partly of fish oils.—Proc. N. W. D. A. 1918, p. 229.

Snapp, E. L.: Two samples of cod liver oil examined came up to the standard.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

Schmid, A.: A note on the use of cod liver oil in the preparation of emulsions.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 74.

Bohrisch, P.: A discussion of the need for testing commercial cod liver oil intended for medicinal use. A table is given showing the results obtained in the analysis of a large number of samples.—Apoth.-Ztg. 1918, v. 33, p. 515–516, 519–520, 523–524, 531–532.

OLEUM OLIVÆ.

Hurley, John: Historical notes on olive oil. Pract. Drug. 1918, v. 36, No. 8, p. 22–25; No. 9, p. 21–24; No. 10, p. 21–24; No. 11, p. 22–24.

Anon.: During the year 1917, Italy exported 8,401,700 kilos of olive oil.—Chem. & Drug. 1918, v. 90, p. 558.

Anon.: A discussion of methods for rendering olive oil limpid an transparent and for preventing it from becoming rancid.—Boll. chim farm. 1918. v. 57, p. 358–360.

Vul'f, E. V. et al.: Data obtained in the analysis of olive oil extracted from olives grown on the south coast of Crimea are given.—Bull. Agric. Intell. 1917, v. 8, p. 735–736, through Chem. Abstr. 1918 v. 12, p. 1005.

Cesaris, Vittorio: Directions are given for the testing and purification of olive oil intended for hypodermic injection.—Boll. chim farm, 1918, v. 57, p. 285–288.

Holland, E. B., et al.: A report of an investigation to determin the stability of olive oil under different conditions of storage.—J Agric. Res. 1918, v. 13, p. 353–366.

Deutsche Pharmaceutische Gesellschaft: It is recommended tha the new edition of the Ph. Germ. include a test for the detection o peanut oil in olive oil.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28 p. 206–207.

Lund, R.: A method for the detection of peanut oil in olive oil is based on the determination of the temperature of crystallization of an alcoholic solution of the fatty acids.—Les Matières grasses, Dec 1917, through Rev. chim. industrielle, 1918, v. 27, p. 13.

Weehuizen, F.: A color reaction for the detection of sesame oil in olive oil is described. The presence of sesame oil is indicated by the production of a violet color when an equal amount of the oil to be tested is shaken with 3 to 5 cubic centimeters of alcohol saturated with HCl and a small quantity of fructose.—Pharm. Weekblad. 1918, v. 55, p. 77–79.

Lea, E. J.: Of 2 samples of sweet oil examined, 1 was rejected.—Rep. California Bd. Health, 1918, p. 167.

Snapp, E. L.: Five samples of olive oil examined came up to the standard.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

Todd, A. R.: One sample of sweet oil examined was not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 88.

McLaughlin, Allan J.: Of 28 samples of olive oil examined, all proved to be of U. S. P. quality.—Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.

Thurston, Azor: Two samples of olive oil received in sealed cans, purporting to be Italian olive oil, were found to consist almost wholly of cottonseed oil.—Proc. Ohio Pharm. Assoc. 1918, p. 129.

LaWall, C. H.: Three out of eight samples of olive oil examined consisted of cottonseed oil. None of the adulterated samples came from drug stores.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 105.

Anon.: One sample of olive oil examined proved to be of U. S. P. quality.—Bull. Vermont Bd. Health, 1918, v. 18, No. 3.

OLEUM RICINI.

Anon.: Notes of a general character on the production of castor il and its uses.—Pharm. Era, 1918, v. 51, p. 76.

Anon.: The cultivation, harvesting, and extraction of oil from the astor bean is discussed.—J. Dept. Agric. Victoria, 1918, v. 16, p. 05–507, through Chem. Abstr. 1918, v. 12, p. 2452.

Anon.: British production of castor oil from the bean imported rom India is stated to be 3,500 to 4,000 tons per month. In 1916–917, India exported 1,723,000 gallons of the oil in addition to large uantities of the bean.—Chem. & Drug. 1918, v. 90, p. 43.

Anon.: It is estimated that 200,000 gallons of castor oil will be roduced in California for use by the Federal Government as a luricant for aeroplanes.—Pharm. Era, 1918, v. 51, p. 280.

Dreyfus, Louis G.: A consular report on the production of castor il in the Malaga district of Spain.—Com. Rep. 1918, No. 159, p. 108.

Mosséri, V.: A detailed discussion of the cultivation of the castor il plant in Egypt, with a report of some investigations of the inluences of climate and soil on the yield of oil.—Exper. Sta. Record, 1918, v. 38, p. 338.

Watson, J. R.: Attention is directed to the fact that castor beans re attacked by corn ear-worm.—Bull. Florida Agric. Exper. Sta. 1918, No. 294.

Stevens, H. E.: A report on gray mold disease of castor beans. The disease is said to be caused by a new species of *Botrytis*.—Bull. Florida Agric. Exper. Sta. 1918, No. 296.

Anon.: "Oil of cavete" obtained from *Omphalea megacarpa*, a plant growing in Brazil, is suggested as a substitute for castor oil.—Pharm. J. 1918, v. 101, p. 95.

Rosé: A note on the acidity of castor oil of Indo-Chinese manufacture.—Exper. Sta. Rec. 1918, v. 39, p. 504–505.

Brightman, R.: A report of researches on the action of nitric acid on castor oil, including the process of nitration and the chemical nature of the product obtained.—Rev. chim. industrielle, 1918, v. 27, p. 121–124.

Frabot, C.: A description of a method for the detection of foreign oils in castor oil based on the critical temperature of solution in gasoline.—Ann. Chim. analyt. 1918, v. 23, p. 7–11.

Chercheffsky: A proposed method for the determination of the purity of castor oil depends on the critical temperature of solution of the oil in alcohol under given conditions. It is stated that as little as 2 per cent. of foreign oils can be detected by this method.—Ann. chim. analyt. 1918, v. 23, p. 75–81.

Frabot, C.: A reply to Chercheffsky's criticism of the author's method for the detection of foreign oils in castor oil. The detection of foreign oil in castor oil based on the critical temperatu of the oil in alcohol is stated to be rapid and exact, but the autho prefers to use petroleum ether as the solvent.—Ann. chim. analy Pharm. Assoc. 1918, p. 105.

Ewe, G.: Four samples of castor oil of good quality gave the fo lowing acid numbers: 1.54, 1.61, 1.59, and 1.63.—Proc. Pennsylvani Pharm, Assoc. 1918, p. 105.

Hankey, Wm. T.: The specific gravities of 4 samples of castor o examined varied from 0.9564 to 0.9588; the refractive indices fro 1.4760 to 1.4780; the saponification value from 181.5 to 182.7; th iodine value from 80.3 to 86.6.—Proc. Ohio Pharm. Assoc. 191 p. 131.

Montgomery, D. W.: The main facts for a dermatologist to re member about castor oil are that it is soluble in alcohol and tha when hot it is a solvent for salicylic acid.—J. Cutaneous Disease 1918, v. 36, p. 446; see also J. Am. M. Assoc. 1918, v. 71, p. 929.

OLEUM SESAMI.

Thurston, Azor: A brief summary of the origin, composition properties, preparation, tests, and uses of sesame oil.—Midl. Drug 1918, v. 52, p. 254–255.

Utz: The author recommends that the Solstien reaction wit zinc chloride be given in the new Ph. Germ. for sesame oil instea of the Baudouin reaction.—Chem. Umschau, 1918, p. 13, throug Apoth.-Ztg. 1918, v. 33, p. 203.

Weehuizen, F.: A note on Baudouin's reaction for sesame oil The substitution of furfural for sugar in the test is not permissibl as it has been shown by Blanksma that the product formed whe hydrochloric acid acts on hexoses is not furfural but ω-hydroxy methyl-furfural.—Pharm. Weekblad, 1918, v. 55, p. 77–79.

OLEUM THEOBROMATIS.

DeGrousseau, E., and Vicongne, A.: British patent No. 116,69 describes the extraction of cacao butter, theobromine, and caffein from cacao by means of a single solvent.—Chem. Abstr. 1918, v. 12 p. 2111.

Deutsche Pharmaceutische Gesellschaft: It is stated that the Ph Germ. method for the determination of the melting point of cacao butter does not give correct results. The time for cooling the fats should be extended from 24 hours at 10° to three days at this temperature.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 204.

Batten, L., and Bywaters, H. W.: A note on the occurrence of mold in cacao butter. The molds present were identified as *Penicillum glaucum* and *Aspergillus oryzae*.—J. Soc. Chem. Ind. 1918, v. 37, p. 242–243 T.

Behrbalk, Leo: A substitute for cacao butter consists of spermati 1 part, olive oil 3 parts.—Pharm. Post, 1918, v. 51, p. 562, rough Chem. Zentralbl. 1918, v. 89, part 2, p. 760.

OLEA VOLATILA.

Blogg, J. K.: A discussion of some essential oils and their disllation—caraway, celery, fennel, lavender, spearmint, parsley, eppermint, rosemary, sage, and thyme.—Chem. Eng. & Min. Rev. 18, v. 10, p. 239–240.

Dreyfuss, Louis G., jr.: An account of the production of volatile ils in southern Spain.—Com. Rep. 1918, No. 12, p. 189–191; Am. erf. 1918, v. 12, p. 325–339.

Anon.: Information is given relative to some volatile oils prouced in the Dutch East Indies—cajuput oil, citronella oil, lemonrass oil, ylang-ylang oil, and patchouli oil.—Chem. & Drug. 1918, v. 1, p. 6.

Stockberger, W. W.: A short account of the production of volatile ils in the United States.—Am. Perf. 1918, v. 13, p. 8–9 and 24.

Anon.: In 1917 Italy exported 73,245,100 kilos of volatile oils, comared with 92,143,200 kilos in 1916.—Chem. & Drug. 1918, v. 90, . 819.

Anderson, George A.: Some essential oils have become quite scarce his year, and in some instances imitations have been offered. These mitations differ considerably from the genuine oils, but the samples eceived have always been correctly labeled as being imitations.—Proc. N. W. D. A. 1918, p. 240.

Griffith, Ivor: A report of experiments to determine the effect of some oxidizing agents (peroxides) on volatile oils, with special reference to tooth powders and pastes.—Proc. Pennsylvania Pharm. Assoc. 1918, v. 41, p. 231–232.

Reclaire, A.: The physical and chemical properties of the volatile oils described before 1917 are given in the form of tables. These ables also show the origin of the oil, its source, and its uses.—Deutsch. Parfumerieztg. 1918, v. 4, p. 77–78, 112–115, 121–123, 129–131, 138–140, 158–160, through Chem. Zentralbl. 1918, v. 89, part 2, p. 1028.

Bennett, C. T.: A compilation of the occurrence and properties of the derivatives and oxidation products of the alcohols of the paraffin series found in essential oils.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 65–67, 87–88, 115–117.

Verley, A.: A report of experimental work on the determination of the constitution of geraniol, linaloöl, and nerol.—Bull. soc. chim. 1918, v. 25, p. 68–80.

Wallach and Grote: A method for the conversion of menthone into pulegone is described.—Chem. Zentralbl. 1918, v. 2 p. 120–121, through Perf. & Ess. Oil Rec. 1919, v. 10, p. 20.

Romeo, Giovanni: A report of researches on the preparation of sulphonic acid derivatives of citral.—Gaz. chim. ital. 1918, v. 48, p. 45–52.

Sernagiotto, E.: Notes on the isomerization products of carvone resulting from the action of light, with special reference to carvone camphor.—Gaz. chim. ital. 1918, v. 48, p. 52–60.

Semmler, F. W., and Liao, Futung: A further account of the constitution and properties of the unicyclic sesquiterpene alcohol, elemol, $C_{15}H_{26}O$.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1286–1291, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 25.

Semmler, F. W., et al.: A report of investigations on the constitution of betulol, an alcohol of the composition $C_{15}H_{24}O$, found in the oil obtained from birch buds.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 417–424.

Bennett, C. T., and Hollins, C.: A summary of our present knowledge of the terpenes and their derivatives. The paper contains 19 tables of physical properties of terpenes and their derivatives and 123 graphic formulas.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 128–162.

Bennett, C. T., and Hollins, C.: An account of researches on the sesquiterpenes and their derivatives.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 172–174, 195–200.

Semmler, F. W. et al.: A report of experiments in the synthetic production of unicyclic sesquiterpenes.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1838–1842, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 118.

Slack, H. F.: A discussion of equipment for a laboratory for essential oil, soap, and similar work.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 83–86, 109–112.

Cocking, T. Tusting: A formula is developed whereby free monatomic alcohols may be determined in volatile oils containing any ester or mixture of esters not affected by acetylation.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 37–39.

Lautenschläger, L.: Methods for determining the aldehyde and ketone constituents of volatile oils using hydrazine solution are described in detail.—Arch. Pharm. 1918, v. 256, p. 87–88.

Earle, J. C.: An investigation of the sensitiveness of the iodol method for detecting cineol in volatile oils. Crystals of cineol iodol compound developed after half an hour in mixtures containing 1 in 20 or 1 in 30 parts.—J. Soc. Chem. Ind. 1918, v. 37, p. 274T.

Parker, C. E., and Hiltner, H. S.: A colorimetric test for the determination of citral is described. An alcoholic solution of metaphenylenediamine hydrochloride and oxalic acid is the reagent employed for the production of color.—J. Ind. & Eng. Chem. 1918, v. 10, p. 608.

Furukawa: An investigation of Kobert's phloroglucinol-hydrohloric acid reaction for the detection of the allyl group in volatile ils shows that it does not always yield reliable results.—J. Chem. nd. Tokyo, 1918, v. 21, p. 513–515.

Bennett, C. T.: In the estimation of pulegone and other ketones n oil of pennyroyal by the neutral sulphite process, it is necessary o increase the period of shaking from one hour to three hours in rder to obtain correct results.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 208.

Boyles, F. M.: Methods for the determination of essential oils in nonalcoholic flavoring extracts are described.—J. Ind. & Eng. Chem. 1918, v. 10, p. 537–539.

Furukawa, S.: A study of the relationship between chemical constitution and the physiologic action of essential oils.—J. Tokyo Chem. Soc. 1918, v. 39, p. 584–660, 809–845 through Chem. Abstr. 1919, v. 13, p. 768.

Cavel, Lucien: A report of an investigation to determine the antiseptic value of a number of volatile oils. The results obtained are compared with phenol.—Compt. rend. acad. sc. 1918, v. 166, p. 827–829.

Lami, Pio: An enumeration of the uses of essential oils in practical pharmacy. Numerous formulæ in which essential oils are a constituent are given.—Boll. chim. farm. 1918, v. 57, p. 241–248, 265–268, 321–328, 344–352, 401–404, 461–467.

Anderson, George A.: One lot of oil of citronella examined was of low grade as it contained only 42.25 per cent of acetylizable constituents calculated as geraniol.—Proc. N. W. D. A. 1918, p. 232.

Anderson, George A.: True oil of savin is practically unobtainable; the so-called French oil, which differs greatly in chemical composition and is distilled from a different plant, being usually substituted.—Proc. N. W. D. A. 1918, p. 236.

Loo, S. C.: Mention is made of some fragrant Chinese flowers and fruits which appear to offer possibilities as commercial sources of volatile oils.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 10–11.

Zoller, H. F.: The analytical constants are given for the oil obtained from grapefruit peel by steam distillation.—Oil, Paint & Drug Rep. 1918, v. 94, No. 6, p. 72B.

Anon.: A report of the examination of some aromatic oils from Seychelles, *Ocimum gratissimum* oil and *Ocimum basilicum* oil.—Bull. Imp. Inst. 1918, v. 16, p. 32–35.

Challinor, R. W. et al.: Data relative to a new species of *Leptospermum* and its essential oil are given. The principal constituents of the latter are citronellal and citral.—J. Poc. Roy. Soc. New South Wales, 1918, v. 52, p. 175–180.

Weehuizen, F.: An analysis of the essential oil obtained from the leaves of *Coleus amboinicus* Lour showed that about half of the oil consists of carvacrol. The plant has a considerable reputation in the Orient as a medicinal herb.—Pharm. Weekblad, 1918, v. 55, p. 1470–1472.

Takagi, S.: An examination of the essential oil of *Artemisia annua* L., especially the portion which boils at a high temperature.—J. Pharm. Soc. Japan, 1918, No. 439, p. 665–676.

Semmler, F. W., et al.: A report of a chemical investigation of gum ammoniac oil.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1823–1837, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 118–119.

Tsuchihashi, Rikita and Tasaki, Saichi: A report of a chemical investigation of the volatile oil obtained from the flower of *Jasminum odoratissimum* L., the schuei flower of Japan.—J. Chem. Ind. Japan, 1918, v. 21, p. 1117.

Anon.: A review of the third edition of a volume by Ernest J. Parry entitled *The Chemistry of Essential Oils and Artificial Perfumes*.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 175–176.

Anon.: A book review calls attention to a volume by A. Rolet which deals with the cultivation, etc., of aromatic and perfumed plants. The work is entitled *Plantes á Parfums et Plantes aromatiques*.—Pharm. Weekblad, 1918, v. 55, p. 1671.

OLEUM ANISI.

Anon.: A sample of so-called "Oleum anisi vulgaris" proved on examination to be a light fennel oil, such as is obtained as a by-product in the manufacture of anethol. Its optical rotation was +33°.—Semi-Ann. Rep. 1917, April, p. 4.

Salamon, M. S., and Bennett, C. T.: Attention is directed to the recent appearance on the London market of star anise oil adulterated with an unidentified fatty oil. It is suggested that the adulterant may be derived from the leaves of the star anise tree.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 324–325.

Hankey, Wm. T.: The specific gravities of 4 samples of anise oil examined varied from 0.9762 to 0.9826; the refractive indices from 1.5500 to 1.5545; the optical rotation from —0.2 to +0.4; the congealing point from 15° to 16.5° C.—Proc. Ohio Pharm. Assoc. 1918, p. 131.

OLEUM AURANTII.

Latham, Charles L.: An account of the development of the orange-oil industry in Jamaica.—Com. Rep. 1918, No. 6, p. 90.

Anon.: A sample of sweet orange oil examined showed the following characteristics: Specific gravity at 15° C. 0.8662; rotary power +58° 18′. A genuine oil should have a specific gravity of

0.848 to 0.853 at 15° C. and an optical rotation of +95° 30′ to 98°.—Semi-Ann. Rep. 1917, April, p. 17.

Éwe, G.: One lot of oil of sweet orange examined was dark in color, but fine in odor and answered all U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 105.

OLEUM AURANTII AMARI, N. F.

Anon.: In commenting on the fourth edition of the supplement to the Ph. Germ., it is stated that the optical rotation of the oil of sweet orange peel may be as high as +98° but that the optical rotation of the oil of bitter orange peel does not exceed +94°.—Semi-Ann. Rep. 1917, April, p. 84.

OLEUM AURANTII FLORUM, N. F.

Anon.: In commenting on the fourth edition of the supplement of the Ph. Germ. it is stated that the upper limit for the specific gravity of Neroli oil should be extended to 0.881. The required ratio of solubility in alcohol can be attained by the use of 80 per cent of alcohol by volume.—Semi-Ann. Rep. 1917, April, p. 84.

OLEUM BERGAMOTTÆ, N. F.

Deutsche Pharmaceutische Gesellschaft: Specifications for inclusion in the monograph on Bergamot oil for the new edition of the Ph. Germ. are proposed.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 379.

Anon.: In criticizing the fourth edition of the supplement to the Ph. Germ. it is stated that the upper limit for the optical rotation of oil of bergamot is too low. It should be 22°. Oils with the required minimum ester content (36 per cent) are not always obtainable, so that one often has to be satisfied with 34 per cent linalyl acetate.—Semi-Ann. Rep. 1917, April, p. 83.

Barillet, C. L. and Berthelé, R.: From a study of the rates of saponification of linalyl, terpenyl and geranyl acetates, it is concluded that saponification in the cold may be a very valuable aid in identifying terpenyl acetate in an acetate of linalyl or in an adulterated oil of bergamot.—Bull. soc. chim. France, 1916, v. 17, p. 20.

Anon.: Nearly all samples of oil of bergamot submitted for inspection were adulterated. One sample showed the following characteristics: specific gravity at 15° C., 0.8761; specific rotatory power +28; acid value 2.7; ester value 70.—Semi-Ann. Rep. 1917, April, p. 16.

OLEUM CAJUPUTI.

Anon.: The fourth edition of the supplement to the Ph. Germ. gives the following characteristics of oil of cajuput: colorless to yellow; specific gravity at 15° C., 0.915 to 0.930; optical rotation, up to —4°; soluble in alcohol in all proportions.—Semi-Ann. Rep. 1917, April, p. 83.

OLEUM CARDAMOMI, N. F.

Parry, E. J.: A comparison of the analytical constants of the oils of cardamom distilled from the fruits grown in Mysore, Malabar, Ceylon, and Cameroon.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 31.

OLEUM CARI.

Lautenschläger, L.: The determination of carvone in oil of caraway by the use of hydrazine solution is described.—Arch. Pharm. 1918, v. 256, p. 88.

OLEUM CARYOPHYLLI.

Deutsche Pharmaceutische Gesellschaft: It is stated that clove oil may show a laevo rotation up to 1.6°. A good oil should contain at least 82 per cent of eugenol.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 380.

OLEUM CASSIAE.

Farwell, O. A.: The plant yielding cassia oil should be designated *Camphorina cassia* (Linné) N. Comb.—Drug. Circ. 1918, v. 62, p. 535.

Dodge, F. D.: In addition to previously known constituents of oil of cinnamon, the author has identified benzaldehyde and methyl salicylaldehyde in two samples recently examined.—J. Ind. & Eng. Chem. 1918, v. 10, p. 1005–1006.

Anon.: A report of an examination of a sample of cinnamon bark from the Gold Coast. Data showing the physical and chemical properties of the oil obtained from the bark are given. The entire oil yielded 68 per cent of aldehydes.—Bull. Imp. Inst. 1918, v. 16, p. 146–147.

Lefeldt, M.: The optical rotation of 2 samples of cinnamon oil was found to be —1.2° and —1.27°, respectively. The determination of the cinnamic aldehyde indicated that these were genuine oils. It is, therefore, thought that it might be advisable to increase somewhat the negative limit for optical rotation in the Ph. Germ.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 177.

Anon.: In commenting on the fourth edition of the supplement to the Ph. Germ., it is stated that a fair commercial sample of oil of cassia contains 80 per cent of aldehyde and more, whereas the pharmacopœia requires only 74 per cent. The evaporation test is criticized on the ground that cassia oil consists mainly of high boiling constituents and evaporates very slowly, thus necessitating heating on a water bath for a long time. The distillation test described in Gildemeister's textbook (2d edition, v. 2, p. 440) is stated to be preferable.—Semi-Ann. Rep. 1917, April, p. 83.

OLEUM CHENOPODII.

Anon.: A better pharmacopœial standard for chenopodium seems highly desirable.—Ann. Rep. Rockefeller Foundation, 1918, p. 138.

Hall, M. C., and Hamilton, H. C.: Experiments showed that the constituent of oil of chenopodium producing gastro-intestinal irritation remains in the undistilled portion when the oil is distilled at a temperature of 125° under a pressure equal to 30 millimeters of mercury. The lighter boiling constituents possess anthelmintic properties and should, therefore, be used in preference to the natural oil.—J. Pharmacol. & Exper. Therap. 1918, v. 11, p. 231–262.

Anon.: Notes on the detection of adulterations in American wormseed oil and on the substitutes which are on the market.—Semi-Ann. Rep. 1917, April, p. 17 and 80–81.

Hall, Maurice C., and Foster, Winthrop D.: Experiments on animals with various anthelmintics, including oil of chenopodium, are reported.—J. Agric. Res. 1918, v. 12, p. 397–447.

Barnes, Milford E., and Cort, Edwin C.: A preliminary report on the use of oil of chenopodium in the treatment of amoebic dysentery. It relieves the clinical symptoms promptly, possesses marked power as an amoebicide, and may be safely administered, when combined with castor oil in a single dose.—J. Am. M. Assoc. 1918, v. 71, p. 350–352.

Hall, Maurice C.: Notes on chenopodium, including some remarks on the administration of the oil.—Therap. Gaz. 1918, v. 42, p. 241–242.

OLEUM CUBEBÆ.

Anon.: The fourth edition of the supplement of the Ph. Germ. gives the following characteristics for oil of cubeb: Occasionally colorless, generally light green to blue-green; specific gravity at 15° C. 0.915 to 0.930; optical rotation —25° to 43°.—Semi-Ann. Rep. 1917, April, p. 83.

OLEUM EUCALYPTI.

Crozier, R. H.: A discussion of the essential oils yielded by various eucalypts and of their commercial possibilities through cultivation in South Africa.—South African J. Industries, 1917, through Perf. & Ess. Oil Rec. 1918, v. 9, p. 58–60.

Smith, Henry G.: A note on the occurrence of terpinene in the oil of *Eucalyptus megacarpa*.—J. Proc. Roy. Soc. New South Wales. 1918, v. 52, p. 529–533.

Smith, H. G.: Observations on the use of the refractometer in the examination of eucalyptus oils.—J. Soc. Chem. Ind. 1918, v. 37, p. 272T–274T.

Anon.: The eucalyptol content of the larger part of the eucalyptus oil obtained in 1917 was only about 30 per cent.—Semi-Ann. Rep. 1917, through Pharm. Zentralh. 1918, v. 59, p. 17.

Barker, Lewellys F., and Rowntree, Leonard G.: A report of a case of myrtol poisoning, with comments on the toxicity of eucalyptus oil and myrtol in human beings and in animals. A bibliography is appended.—J. H. Hosp. Bull. 1918, v. 29, p. 215–221.

OLEUM FŒNICULI.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the Ph. Germ. test for anethol in oil of fennel be made to read "Crystals of anethol separate out in fennel oil on cooling below 0° C. and which do not melt again completely until warmed to at least 5 to 6° C."—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 380.

OLEUM GAULTHERIÆ.

Anon.: Notes on the possibility of the production of oil of wintergreen from *Gaultheria fragrantissima* Wall., which grows in India. An abstract.—J. Soc. Chem. Ind. 1918, v. 37, p. 342R.

OLEUM LAVANDULÆ.

Lefeldt, M.: The requirements of the Ph. Germ. relative to the solubility of oil of lavender in dilute alcohol are criticized. It is stated that those oils which show a high ester number and a high content in linalyl acetate do not fulfill the solubility requirements.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 177.

Prins, H. J.: Adulteration of lavender oil with terpenyl acetate can best be detected by its much slower rate of saponification than the linalyl acetate of the genuine oil.—Olien en Vetten, 1917, v. 2, p. 1–2, 69–70, through Chem. Weekblad, 1917, v. 14, p. 977.

OLEUM LIMONIS.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the specifications for the rotatory power of oil of lemon given in the Ph. Germ. be extended to the limits +56° to +65° at 20° C.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 380.

Lautenschläger, L.: The determination of citral and citronellal in oil of lemon by the use of hydrazine solution is described.—Arch. Pharm. 1918, v. 256, p. 88.

Parker, C. E., and Hiltner, H. S.: A colorimetric test for the determination of citral is described. An alcoholic solution of metaphenylenediamine hydrochloride and oxalic acid is the reagent employed for the production of color.—J. Ind. & Eng. Chem. 1918, v. 10, p. 608.

Éwe, G.: One sample of oil of lemon, "Extra Strong," assayed 20.5 per cent citral.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 105.

Roberts, J. G.: Two lots of "Oil of Lemon, Terpeneless," assayed 28.6 per cent and 26.7 per cent of citral, respectively.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 105.

OLEUM MENTHÆ PIPERITÆ.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the limits for specific gravity and rotation given in the Ph. Germ. for oil of peppermint be extended to $d_{15°}=0.900$ to 0.920, $\alpha_D=-20$ to $-34°$.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 382.

Walbaum, Heinrich: A contribution to our knowledge of the chemistry of Japanese peppermint oil. The isolation of a new constituent, the phenylacetic ester of hexenol, is reported.—J. prakt. Chem. 1918, v. 96, p. 245–250, through Chem. Zentralbl. 1918, v. 89, part 2, p. 25–26.

OLEUM MENTHÆ VIRIDIS.

Rabak, Frank: A report of an investigation to determine the influence of the time of harvesting, drying, and freezing of spearmint upon the yield and odorous constituents of the oil.—J. Ind. & Eng. Chem. 1918, v. 10, p. 275–279.

Anon.: In commenting on the fourth edition of the supplement to the German pharmacopœia, it is stated that the optical rotation of spearmint oil should be extended to −34 to −52°.—Semi-Ann. Rep. 1917, April, p. 85.

OLEUM MYRCIÆ, N. F.

Anon.: An investigation of the causes of variation in the commercial oil of bay. The yield of a poor quality of oil is due to the distillation of leaves which contain the two forms of *Pimenta acris* known as "Bois d'Inde Citronelle" and "Bois d'Inde Anise." An abstract.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 278.

Anon.: Data showing the physical and chemical properties of Fiji bay oil are given. The oil was found to contain only 23 per cent of phenols as compared with 60 per cent in a good oil.—Bull. Imp. Inst. 1918, v. 16, p. 244.

OLEUM PICIS LIQUIDÆ RECTIFICATUM.

Millard, E. J.: American tar oil is rectified by distillation with steam and treatment with sodium hydroxide. The rectified oil is colorless and has a weak turpentine odor. The analytical data obtained in the examination of 3 commercial samples are given.—Pharm. J. 1918, v. 46, p. 28–29.

OLEUM PINI PUMILIONIS.

Anon.: In commenting on the fourth edition of the supplement to the Ph. Germ., it is stated that specific gravity values as low as 0.858 have been observed in Tyrolian pine needle oils. Furthermore, 8 volumes of alcohol are required to effect complete solution under certain conditions.—Semi-Ann. Rep. 1917, April, p. 85.

OLEUM ROSÆ.

Anon.: Owing to climatic influences, as well as war conditions, the 1918 yield of rose oil will be less than that of 1917. Nearly 300 pounds of leaves of the 1918 crop were required to obtain an ounce of oil. The yield in 1917 was 11,000 pounds and that of 1917 is estimated at 6,000 pounds.—J. Soc. Chem. Ind. 1918, v. 37, p. 475R.

OLEUM SANTALI.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the new edition of the Ph. Germ. place the upper limit for the rotation of sandalwood oil at—21°.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 383.

Hankey, Wm. T.: A specific gravity of 0.9687 to 0.9772 was observed for oil of santalwood. The refractive index varied from 1.5045 to 1.5050; the optical rotation from −11.4 to −18.5; the solubility in 70 per cent alcohol from 1:43 to 1:5; the santalol content from 85.7 to 98.1 per cent.—Proc. Ohio Pharm. Assoc. 1918, p. 133.

Anon.: Of 3 samples of oil of santal examined, 1 was found to be adulterated with benzyl alcohol, another with cedar oil, and the third with a fatty oil.—Semi-Ann. Rep. 1917, p. 17; Pharm. Zentralh. 1918, v. 59, p. 22.

OLEUM SASSAFRAS.

Anon.: The fourth edition of the supplement to the Ph. Germ. gives the following characteristics for oil of sassafras: Yellow to reddish-yellow in color; specific gravity 1.070 to 1.080; optical rotation +2 to +4°; soluble in 1 to 2 volumes of alcohol.—Semi-Ann. Rep. 1917, April, p. 85.

Roberts, J. G.: One sample of oil of sassafras examined was of U. S. P. quality, except that it did not comply with the optical rotation standard of +3° to +4°.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 105.

Anon.: A sample labelled oil of sassafras was found to consist of pure safrol.—Semi-Ann. Rep. 1917, p. 17; Pharm. Zentralh. 1918, v. 59, p. 23.

OLEUM SINAPIS VOLATILE.

Sollmann, T.: The irritant efficiency of 1 per cent solutions or suspensions of mustard oil varies greatly according to the solvent used, being most intense in mucilage of acacia and simple sirup, and practically absent in olive oil and turpentine.—J. Pharmacol. & Exper. Therap. 1918, v. 11, p. 229–230.

OLEUM TEREBINTHINÆ.

Shinosaki, Y.: Data relative to the physical and chemical properties of Japanese oil of turpentine (oil of *Pinus Thumbergii*) are presented.—J. Chem. Ind. Tokyo, 1918, v. 21, p. 763.

Anon.: A report on the production of turpentine oil and rosin in India.—Bull. Imp. Inst., through Com. Rep. 1918, No. 153, p. 7–11.

Halse, O. M., and Samuelsen, S.: A report on the examination of Norwegian turpentine oil—an oil recovered by steam distillation from pulp mill sulphite waste. Tables are given of distillation fractions, amounts, and physical constants.—Tidskr. f. Kem. 1918, v. 15, p. 177–184.

Schorger, A. W.: The so-called sulphite turpentine, obtained as a by-product in the manufacture of wood pulp by the sulphite process, consists principally of cymene, and may be utilized in the production of toluene and carvacrol.—J. Ind. & Eng. Chem. 1918, v. 10, p. 258–260.

Anon.: A review of the work done on turpentine oil since 1916.—Semi-Ann. Rep. 1917, April, p. 61–80.

Anon.: Coen's method for the detection of camphor oil in oil of turpentine is described. The cinnamic aldehyde test for the detection of petroleum oils in turpentine oil is recommended.—Semi-Ann. Rep. 1917, April, p. 17; Pharm. Zentralh. 1918, v. 59, p. 23.

Enz, K.: It is recommended that Herzfeld's test for the presence of rosin oil, rosin essences and pine oils in oil of turpentine be included in the new edition of the Ph. Germ. The inclusion of the bromine test for hydrocarbons is also recommended.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 352.

Tausz, Jenö: New methods for the determination of turpentine oil, and the application of these methods to the detection of adulteration, are described.—Chem. Ztg. 1918, v. 42, p. 349–351, through Chem. Zentralbl. 1918, v. 89, part 2, p. 563.

Thurston, Azor: All samples of turpentine oil examined complied with the U. S. P. tests for purity.—Proc. Ohio Pharm. Assoc. 1918, p. 130.

Todd, A. R.: Of 5 samples of oil of turpentine examined, 3 were not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 88.

Hall, Maurice C. and Foster, Winthrop D.: Experiments on animals with various anthelminties, including oil of turpentine, are reported.—J. Agric. Res. 1918, v. 12, p. 398–447.

OLEUM TEREBINTHINÆ RECTIFICATUM.

Dedichen, H., and Halse, O. M.: U. S. patent No. 1,253,793 describes the refining and deodorizing of raw turpentine oil by treatment with ultraviolet rays while subjected to the action of air or oxygen. The oil is then treated with ferric chloride to refine and deodorize it and to obtain a mixture of α- and β- pinenes containing dextro-rotary β-pinene.—Chem. Abstr. 1918, v. 12, p. 770.

OPII PULVIS.

Ewe, George E.: Fullers' earth is not a satisfactory diluent for preparing U. S. P. powdered opium because it adsorbs some of the morphine and low assay results are obtained as a consequence.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 163.

Anon: The use of the marc obtained in the preparation of the tincture of opium, together with sugar of milk should be permitted in the dilution of opium to a definite morphine content.—Pharm. Zentralh. 1918, v. 59, p. 28.

Söderberg, Gustav: A method for the microdetermination of morphine in powdered opium is described.—Pharm. Post. 1918, v. 51, p. 385, through Chem. Zentralbl. 1918, v. 89, part 2, p. 316–317.

OPIUM.

Tschirch, A.: A detailed history of the production of opium in European countries.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 149–154.

Czajowski, Adolf: Observations on Polish opium. Data are given showing the alkaloidal content of Polish opium, as well as its physiological effect.—Pharm. Zentralh. 1917, v. 58, p. 287–291.

Plowman, S.: Notes on the production of opium in Australia in the early eighties of the last century.—Australas. J. Pharm. 1918, v. 33, p. 279.

Valdiguié and Catillon: An account of the cultivation, harvesting, characteristics, and commerce of Salonika opium. Salonika opium contains crystals of calcium oxalate. The morphine content is high, ranging from 12 to 13 per cent, and even 15 and 17 per cent.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 305–309; J. pharm. et chim. 1918, v. 18, p. 81–84.

Fruschkoogoraz, J.: An account of the cultivation of opium in southern Serbia. The best yield is stated to be 16 kg per hectar. In 1915 the total production was 125,000 kg.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 593–594.

Brunetti, W.: Data relative to the sources and characteristics of morphine, codeine, and moisture content of opium from Serbian Macedonia are presented.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 95–100.

Georgiades: A contribution to the study of Egyptian opium. The morphine content was found to be about 7 per cent on the average, although some samples ran as high as 12 or even 15 per cent.—Répert. pharm. 1918, v. 29, p. 345–349.

Anon.: The average annual production of opium in Turkey varies between 6,000 and 7,000 chests. Last year only 2,000 chests were obtained and this year it is estimated that the amount will be reduced to 1,000 chests.—Pharm. Ztg. 1918, p. 569, through Pharm. Weekblad, 1918, v. 55, p. 1640.

Watt, Henry E.: A yield of not less than 0.3 per cent of cryptonine was obtained from Indian opium. The properties of the alkaloid and some of its salts are described.—Pharm. J. 1918, v. 100, p. 147.

Tunmann, O.: Pharmacognostical notes on Bulgarian opium.—Apoth.-Ztg. 1917, v. 32, p. 550, through Pharm. Zentralh. 1918, v. 59, p. 339–340.

Anon.: A summary of the opium situation in China from the beginning of the 18th century to the present time.—Pharm. Era, 1918, v. 51, p. 207.

Anon.: The cultivation of the opium poppy in Egypt has been prohibited in order to increase the area under cultivation for foodstuffs.—Chem. & Drug. 1918, v. 90, p. 846.

Kemp, Edwin C.: A decree appearing in the "Journal Officiel Tunisien" of Feb. 13, 1918, prohibits the cultivation of the poppy plant in Tunisia and orders the destruction of wild poppy plants.—Com. Rep. 1918, No. 81, p. 85.

Anon.: An article describing briefly the regulation covering the distribution of opium in Formosa.—Pharm. Era, 1918, v. 51, p. 172.

Annett, Harold E., and Singh, Hardayal: Experimental data relative to the effect of heat on the morphine content of opium are given. Opium heated in a water oven at 97°–98° C. may suffer a large decrease in morphine content. This does not take place in the first five days' heating, and, therefore, can not affect the results obtained in the assay of opium by the Ph. Brit. method—J. Soc. Chem. Ind. 1918, v. 37, p. 315-317T.

Tunmann: An account of the identification of opium by means of meconin and meconic acid.—Apoth.-Ztg. 1916, v. 31, p. 83, through Pharm. Zentralh. 1917, v. 58, p. 49-51.

Ewe, George E.: Methods for overcoming certain defects in the opium assay of the U. S. P. IX, when applied to the testing of opium preparations, are described.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 163.

Maske, Wm., Jr.: Some modifications of the U. S. P. method for the assay of opium, which make it less cumbersome without diminishing the accuracy, are described.—J. Am. Pharm. Assoc. 1918, v. 7, p. 248-249.

Rakshit, J. M.: Data obtained in the polarimetric estimation of morphine in opium are presented. Several samples of opium were assayed by this method and the results obtained compared with the chemical methods given in the Ph. Brit. and the U. S. P.—Analyst, 1918, v. 43, p. 320-321.

Hill, C. A.: A suggested improvement of the Ph. Brit. method of estimating morphine in opium consists of replacing the counterpoised filters by a Gooch crucible fitted with a filter.—Analyst. 1918, v. 43, p. 214.

von Friedrichs, O.: A note on the use of ethyl acetate in the determination of morphine in opium. The results obtained with this solvent are low.—Pharm. Zentralh. 1918, v. 59, p. 329–330.

Soderberg, G.: A microtitrimetric method for the determination of morphine in opium preparations is described. Special directions are given for the determination of morphine in opium powder, opium extract, and tincture of opium.—Pharm. Post, 1918, v. 51, p. 385, through Chem. Zentralbl. 1918, v. 2, p. 316–317.

Heiduschka, A., and Faul, M.: From experiments, it is concluded that meconic acid contained in opium does not interfere with the precipitation of morphine by ammonia in the opium assay as described in the Ph. Germ.—Arch. Pharm. 1917, v. 255, p. 482–496.

Heiduschka, A., and Faul, M.: An experimental study of the quantitative estimation of morphine according to the method of the Ph. Germ. V. Also an investigation of the solubility of morphine in ammonia solutions.—Arch. Pharm. 1917, v. 255, p. 441-466; 1918, v. 256, p. 122; Chem. Zentralbl. 1918, v. 89, part 1, p. 240–242.

Annett, H. E., and Singh, Hardayal: A report of researches showing the effects of codeine in hindering the precipitation of morphine by ammonia from a solution of its lime compound.—Analyst, 1918, v. 43, p. 205–213.

Dott, D. B.: Comments on the recommendation of Annett and Singh that codeine in the opium assay be removed from the lime solution by means of toluene previous to treatment with ether and ammonium chloride in order to avoid the solvent effect of codeine on morphine. This procedure is found to be unnecessary.—Pharm. J. 1918, v. 101, p. 318.

Heiduschka, A., and Faul, M.: Notes on the determination of morphine with reference to the solubility of morphine in ammonia.—Arch. Pharm. 1918, v. 256, p. 122.

Jensen, Viggo, and Rumry, Florence L.: Straub's biological test for opium alkaloids is not specific, since indican gives a similar reaction. The dose of indican for a 15 gram mouse is 0.1 cubic centimeter of a 1 in 100 solution.—J. Pharmacol. 1918, v. 11, p. 178–179.

Fühner, H.: A critical review of opium, pantopon, laudanum, and narcophine.—Therap. Monatsh. 1918, v. 32, p. 409, through Zentralbl. Biochem. u. Biophysik. 1918, v. 20, p. 318.

Dott, D. B.: Descriptive notes on some of the alkaloids of opium, namely, morphine, codeine, thebaine, narcotine, papaverine, and narceine.—J. Soc. Chem. Ind. 1918, v. 37, p. 430R–431R.

Kaufmann, Adolf, and Dürst, Niclaus: Researches on the constitution of the morphine alkaloids. II. The synthesis of isoquinoline derivatives.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1630–1637, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 122–123.

van Itallie, L., and van Toorenburg, J.: An account of microchemical tests applicable to some of the opium alkaloids, pseudomorphine, protopine, tritopine, cryptopine, laudanine, laudanidine, and laudanosine.—Pharm. Weekblad, 1918, v. 55, p. 169–178.

Rakshit, J. M.: Data showing the physical and chemical constants of opium wax are presented.—Analyst, 1918, v. 43, p. 321–322.

Mannich, C.: Nearly colorless preparations of opium are prepared by treating the aqueous extract with lead or copper acetate solutions and subsequently precipitating the metal with hydrogen sulphide.—Pharm. Weekblad, 1918, v. 55, p. 64–65.

Macht, David I.: A report of a study to determine the relation of chemical structure of opium alkaloids to their action of smooth muscle structures.—Proc. Soc. Exper. Biol. & Med. 1918, v. 15, p. 63–66; J. Pharmacol. 1918, v. 11, p. 176.

Macht, David I., and Weiner, J.: An investigation of the action of opium alkaloids on *Trypanosoma brucei* showed that those of the papaverine group were very toxic *in vitro*, but that they had no effect in shortening the course of the disease when injected into rats.—Proc. Exper. Biol. Med. 1918, v. 16, p. 26–27.

OVI ALBUMEN RECENS, N. F.

Riddle, O., and Anderson, C. E.: A study of the effects of quinine feeding on the production of egg albumen in birds.—Am. J. Physiol. 1918, v. 47, p. 92–102.

Sorensen, S. P. L. et al.: Studies on the preparation, composition, and properties of egg albumen.—Compt. rend. trav. lab. Carlsberg. 1917, v. 12, p. 1–11, 68–163, 166–212, 213–261, and 262–372, through Chem. Abstr. 1918, v. 12, p. 2575–2577.

Haas, A. R. C.: A description of a method for the preparation of ovalbumin, accompanied by data showing refractive indices of its solutions.—J. Biol. Chem. 1918, v. 35, p. 119–125.

Rebello-Alves, S., and Benedicenti, A.: An investigation of the effect of mixing with metallic powders on the catalytic power of egg albumen toward hydrogen peroxide. Catalysis is increased 5 or 6 times by beating with cobalt powder.—Arch. farmacol. sper. 1917, v. 24, p. 150–156.

OVI VITELLUM RECENS, N. F.

Barbieri, Nicola Alberto: A physiological method of separating the various components of egg yolks is described.—Gaz. chim. ital. 1917, v. 47, part 1, p. 1–37.

Levene, P. A., and West, C. J.: A study of hydrocephalin of egg yolk to determine its chemical constitution.—J. Biol. Chem. 1918, v. 35, p. 285–290.

Lamb, M. C., and Harvey, A.: The fat in egg yolk is determined by spotting onto Adams paper or a strip of coarse fat-free filter paper, drying, and extracting in a Soxhlet apparatus.—J. Soc. Leather Trades Chem. 1917, v. 1, p. 186–187. through Chem. Abstr. 1918, v. 12, p. 636.

Anon.: Data are presented showing the iodine number and angle of refraction of the fat of egg yolk extracted by means of petroleum, ether, and chloroform.—Mitt. Lebensm. Hyg. 1918, v. 9, p. 135–136.

OVUM GALLINACEUM, N. F.

Pennington, M. E. et al.: Directions are given for candling eggs.—Bull. U. S. Dept. Agric. 1918, No. 565, p. 1–22.

Le Roy, C. A.: The construction and operation of an apparatus for photographing the air chamber in eggs for the detection of fraud are described.—Compt. rend. acad. sci. 1917, v. 165, p. 1026–1028.

Dvorachek, H. E., and Stout, S. R.: A comparison of several methods for preserving eggs for home use.—Bull. Arkansas Agric. Exper. Sta. 1918, No. 152, p. 1–12.

Linossier, G.: Eggs contain a substance which has a toxic action on certain predisposed persons. The toxic substance is destroyed by heat sufficient to coagulate all of the albumin in the egg, in the yolk as well as in the white. An abstract.—J. Am. M. Assoc. 1918, v. 70, p. 1573.

Hendrickson, N., and Swan, G. C.: A presentation of methods in use for the determination of ammoniacal nitrogen in eggs.—J. Ind. & Eng. Chem. 1918, v. 10, p. 614–617.

Garnier, L.: A presentation of analytical data obtained in the analysis of a number of samples of egg powders.—J. pharm. et chim. 1918, v. 18, p. 353–357.

OXYGENIUM.

Anon.: The methods of production, uses, and properties of oxygen are described.—Travelers Standard, 1918, v. 6, p. 137–145, through Chem. Abstr. 1918, v. 12, p. 2688.

Runge, H.: German patent No. 294,485 describes the separation of air into oxygen and nitrogen by liquefaction and rectification.—Chem. Abstr. 1918, v. 12, p. 410.

Emanuel, P. A.: U. S. patent No. 1,263,314 describes an apparatus for the electrolytic production of oxygen and hydrogen from water.—Chem. Abstr. 1918, v. 12, p. 1531.

Weber, F. W.: U. S. patent No. 1,252,973. A liquid catalyst for liberating oxygen from perborates is formed by mixing infusorial earth with a paste of ox liver, adding almond meal to the mixture and extracting it with a mixture of water 70 per cent and glycerol 30 per cent.—Chem. Abstr. 1918, v. 12, p. 749.

Fowler, A., and Brooksbank, J.: some new observations on the third line-spectrum of oxygen are made.—Sci. Abstr. 1918, v. 20A, p. 398.

Hughes, A. L., and Dixon, A. A.: The ionizing potential of oxygen, determined by a modification of the method of Frank and Hertz. was found to be 9.2.—Phys. Rev. 1917, v. 10, p. 495–514.

Mahlie, W. S.: An improvised apparatus for the analysis of commercial oxygen is constructed from the absorption pipettes of an Orsat flue gas apparatus, an ordinary burette, and a glass tube for leveling.—Chem. Analyst, 1918, v. 24, p. 4–7.

Brechot, A.: From experiments it is concluded that oxygen can be injected into the veins slowly without harmful effects. Rapid injection produces excitation.—J. pharm. et chim. 1918, v. 18, p. 92.

PANCREATINUM.

Sherman, H. C., and Neun, Dora E.: The proteolytic action on casein of the following preparations was investigated: high grade commercial pancreatins, the residue remaining when pancreatin is extracted once with nine parts of 50 per cent alcohol, etc.—J. Am. Chem. Soc. 1918, v. 40, p. 1138–1145.

Ewe, George E.: Data showing the effect of sodium chloride and of sodium nitrate on the activity of pancreatin, diastase, and rennin are given.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 173–174.

PAPAVERIS FRUCTUS, N. F.

Zörnig: The ripe fruits of the poppy should be eliminated from all pharmacoperias, as they contain dangerous alkaloids. They are used principally for preparing a tea for small children.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 549–553.

Reutter, L.: Analytical data obtained in the analysis of the juice of poppy capsules are presented. The analyses were carried out for the purpose of determining if morphine is present as such in the living plant.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 55–56.

PARACOTO, N. F..

Rusby, H. H.: Neither coto nor caracoto bark have come to market in recent years, all supplies in the market being spurious and representing a number of barks wholly different from one another in their properties—Proc. New York Pharm. Assoc. 1918, p. 193.

PARAFFINUM.

McAfee, A. McD.: U. S. patent No. 1277092. Paraffin is purified by heating with anhydrous aluminum chloride at a temperature of 65°.—Chem. Abstr. 1918, v. 12, p. 2126.

Kunz-Krause, Herman: Notes on the application of Fleizig's method for the determination of the melting point of fats to the determination of the melting point of paraffin.—Pharm. Zentralh. 1917, v. 58, p. 561–562; Chem. Zentralbl. 1918, v. 89, part 1, p. 239.

Bergmann, M.: The oxidation products of paraffin obtained by blowing air through refined white paraffin wax were identified as lignoceric acid, a neutral substance melting at 48° C., and another acid, probably isopalmitic acid.—Ztschr. angew. Chem. 1918, v. 31, part 1, p. 69–70, through J. Soc. Chem. Ind. 1918, v. 37, p. 362A.

PARALDEHYDUM.

Soc. Chimique des Usines du Rhone: British patent No. 110906 describes the preparation of paraldehyde by heating ethylidene diacetate under reduced pressure in the presence of catalysts, such as acids or acid salts.—Chem. Abstr. 1918, v. 12, p. 484.

Lefeldt, M.: The solidification point of paraldehyde as observed by the author is between 8.5 and 10° C. The Ph. Germ. fixes it at 6 to 7° C.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 178.

Anon.: The results obtained in the examination of samples of British and American paraldehyde are tabulated. With one exception, there was little difference observed in the quality of the two groups of products.—Chem. & Drug. 1918, v. 90, p. 598.

PASTA ZINCI, N. F.

Schneider, A.: Zinc oxide paste which was formerly made with ard can be replaced by a mixture of equal parts of zinc oxide, talc, glycerin, and water.—Pharm. Zentralh. 1918, v. 59, p. 330–331.

Anon.: A zinc paste is prepared by mixing 250 grams of zinc xide and 500 grams of talcum with a mucilage of Irish moss prepared by boiling 10 grams of Irish moss with 600 cubic centimeters f water. An abstract.—Pharm. Weekblad, 1918, v. 55, p. 311.

PELLETIERINÆ TANNAS.

Hess, Kurt, and Eichel, Annaliese: Alkaloids of the pomegranate tree. III. Constitution of pelletierine. IV. A scheme for the isolation of pure pelletierine alkaloids. Determination of the constitution of methylisopelletierine. Transformation of conhydrine into methylisopelletierine.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1192–1199, 1386–1407, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 33–35.

Hall, Maurice C., and Foster, Winthrop D.: Experiments on animals with various anthelmintics, including pelletierine tannate, are reported.—J. Agric. Res. 1918, v. 12, p. 397–447.

PEPSINUM.

Lefeldt, M.: It is suggested that the Ph. Germ. require that the moisture content of pepsin should be determined and the limits of moisture content fixed. Unless this is done the results obtained in the digestion test will vary to a considerable extent.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 179–180.

Arthus, Maurice, and Siegwart: A method for the evaluation of pepsin is based on the power of the latter to liquefy gelatin. After a period of 24 hours the viscosity of the gelatin solution which has been in contact with pepsin is determined.—Compt. rend. soc. biol. 1918, v. 81, p. 957.

Gruber, Howard: The author agrees with the U. S. P. in that the eggs used for the testing of pepsin should be from 5 to 12 days old.—Südd. Apoth.-Ztg. 1918, v. 58, p. 226, through Pharm. Zentralh. 1918, v. 59, p. 289.

Ringer, W. E.: A report of studies on the pepsin of Pekelharing.—Arch. néerl. de physiol. 1918, v. 2, p. 571–593, through Physiol. Abstr. 1918, v. 3, p. 408.

Ryden, Th.: Data obtained in the evaluation of a number of commercial samples of pepsin are presented in the form of a table.—Svensk farm. Tidskr. 1918, v. 22, p. 502–504.

Engelhardt, H.: Two shipments of pepsin examined were deficient in proteolytic power.—Proc. Maryland Pharm. Assoc. 1918, p. 81.

PETROLATUM

Lefeldt, M.: The Ph. Germ. requires that petrolatum album and petrolatum flavum shall not appear granular or crystalline when viewed under the microscope. It is stated that fine crystalline needles are always visible under the microscope, even in the best samples of these materials and as a consequence the requirement should be changed.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 192.

Enz, K.: It is recommended that a test for yellow aniline dyes be introduced into the new edition of the Ph. Germ. under vaseline.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 352.

PETROLATUM LIQUIDUM.

Erichesen, Hugo: A brief historical account of the use of paraffin oil in medicine.—Bull. Pharm. 1918, v. 32, p. 281.

Éwe, George: An excellent emulsion of liquid petrolatum can be made by following the U. S. P. directions for cod liver emulsion.—Proc. Pennsylvania Pharm. Assoc. 1918, v. 41, p. 174.

Éwe, G.: A few samples of liquid petrolatum examined contained excessive carbonizable impurities.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

Roberts, J. G.: A three drum lot of liquid petrolatum examined was rejected because it contained an excess of carbonizable impurities and had a slight taste of kerosene.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

PETROSELINUM.

Farwell, O. A.: The binomial, *Apium petroselinum* Linné should replace *Petroselinum sativum* Hoffman.—Drug. Circ. 1918, v. 62, p. 536.

PETROXOLINUM IODI, N. F.

Engfeldt, N. O.: A report of an investigation dealing with the preparation and analysis of certain pharmaceuticals containing iodine.—Svensk farm. Tidskr. 1918, v. 22, p. 309–314, 325–328, 341–347, 357–361.

PHENOL.

Peterkin, A. G.: A description of the manufacture of synthetic phenol. Illustrated.—Tr. Am. Inst. Chem. Eng. 1918, v. 11, p. 146–166.

Cappelli, G.: The author shows that the presence of thiophenol is the cause of the repulsive odor of some samples of synthetic phenol. Directions for removing this substance are given.—Gazz. chim. ital. 1918, v. 48, No. 2, p. 107–113.

Lefeldt, M.: The Ph. Germ. requires that an aqueous solution of phenol (1:15) shall not redden litmus paper. This test is stated to be too severe as the author has always observed a weak acid reaction with litmus paper in all of the samples of phenol which he has examined.—Ber. Deutsch. pharm. Gesellsch. 1917, v. 27, p. 158.

Fox, J. J. and Barker, M. F.: Notes on the determination of the solidifying and boiling points of phenol and cresol, with an account of the methods employed and the results obtained.—J. Soc. Chem. Ind. 1918, v. 37, p. 268T–272T.

Sharples, George H.: Notes on the application of phenol tests to works practice.—J. Soc. Chem. Ind. 1918, v. 37, p. 109T–113T.

Dawson, Harry M. and Mountford, Christopher A.: Methods for the estimation of phenol and the three isomeric cresols in mixtures of these substances are described in detail.—J. Chem. Soc. Lond. 1918, v. 113, p. 935–944.

Knight, G. W. et al.: From a series of determinations of the specific gravities and solidifying points of a number of mixtures of pure phenol and pure o-, m-, and p-cresols, the authors have devised a method for determining the percentage of phenol present in unknown mixtures of these compounds.—J. Ind. & Eng. Chem. 1918, v. 10, p. 9–18.

Anderson, George A.: Carbolic acid is being manufactured in this country in large quantities and meets all the U. S. P. requirements.—Proc. N. W. D. A. 1918, p. 238.

Bachman, Gustav: Two samples of carbolic acid put up by wholesale grocers and labeled to contain a saturated solution of phenol, assayed 13.4 per cent of carbolic acid. One sample labeled to contain 5 per cent of carbolic acid assayed 4.95 per cent. Two other samples, labeled, respectively, to contain 7½ and 10 per cent, assayed 8.4 for the 7½ and 9.3 for the 10 per cent.—Proc. Minnesota Pharm. Assoc. 1918, p. 119.

Engelhardt, H.: A few shipments of carbolic acid examined possessed a nauseating odor resembling that of sulphuretted compounds.—Proc. Maryland Pharm. Assoc. 1918, p. 81.

Hankey, Wm. T.: Four samples of phenol examined assayed from 96.38 to 100 per cent. phenol. The melting point varied from 38.5° to 40° and the congealing point from 38° to 39.5°.—Proc. Ohio Pharm. Assoc. 1918, p. 133.

PHENOLPHTHALEINUM.

Fürbringer: Attention is directed to the toxic action of phenolphthalein. It is stated that phenolphthalein, even in doses which do not approach the maximum, may produce a weakening of the heart action, hemolysis and anatomical lesions of the kidneys.—Deutsch. med. Wchnschr. 1917, v. 43, p. 842, through Pharm. Zentralh. 1917, v. 58, p. 544.

Anon.: No toxic symptoms were observed in a child who took by accident 10 phenolphthalein tablets, or 1.80 grams of the drug.—Paris Med. 1918, p. 463.

Anderson, George A.: Supplies of phenolphthalein have become much more plentiful during the year. This is due to the fact that American manufacturers are now preparing phthalic acid of a good grade and the phenolphthalein on the market has showed an increasing tendency toward a higher standard of purity.—Proc. N. W. D. A. 1918, p. 240.

PHENYLIS SALICYLAS.

Salkover, B.: A method is described for the determination of salol and acetanilid, likewise salol and phenacetin in mixtures containing these substances.—Südd. Apoth.-Ztg. 1917, v. 57, p. 484, through Pharm. Zentralh. 1917, v. 58, p. 587.

Roberts, J. G.: One sample of salol examined was of U. S. P. quality, except that it was of a yellowish color.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 107.

PHOSPHORUS.

Palet, Luciano J.: An attempt to clarify the confusion of names and dates relating to the discovery of phosphorus. Brand is stated to have discovered phosphorus sometime during the period 1669–1677 and to have communicated the secret to Kraft, to whom the discovery is sometimes attributed.—Anales soc. quim. Argentina, 1917, v. 5, p. 238–243.

Smits, A., et al.: A report of experiments with black and violet modifications of phosphorus.—Proc. K. Akad. Wetensch. Amsterdam, 1918, v. 20, p. 392–393, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 75.

Van Laar, J. J.: Data obtained in the calculation of the critical temperature and pressure of phosphorus are presented.—Proc. Acad. Sci. Amsterdam, 1917, v. 20, p. 138–148, through Chem. Abstr. 1918, v. 12, p. 875.

Mach, F., and Lederle, B.: A method for the determination of white phosphorus in mouse poisons is described.—Chem. Ztg. 1918, v. 42, p. 491, through J. Soc. Chem. Ind. 1918, v. 37, p. 747A.

PHYSOSTIGMA.

Polonovski, Max, and Polonovski, Michel: Researches on the constitution of the alkaloids of Calabar bean. I. The action of methyl iodide on bases of the eserine and geneserine series. II. Hydrogenations in the eserine and geneserine series.—Bull. soc. chim. France. 1918, v. 23, p. 215–218.

Roberts, J. G.: The alkaloidal content of one lot of physostigma examined was 0.14 per cent. which is a trifle under the U. S. P. standard of 0.15 per cent.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

PHYSOSTIGMINÆ SALICYLAS.

Herzig, J., and Lieb, H.: The micro-method for the determination of imino-methyl groups in eserine and eseroline indicates the presence of one more such group than is found by the ordinary macro-method.—Monatsh. Chem. 1918, v. 39, p. 285–292, through J. Soc. Chem. Ind. 1918, v. 37, v. 671A.

Fühner, H.: A physiological method for the toxicological detection of physostigmine depends on the fact that the action of acetylcholine on the musculature of the blood vessels is greatly increased by minute amounts of physostigmine. By this method $\frac{1}{100,000}$ milligram of physostigmine can be detected.—Biochem. Ztschr. 1918, v. 92, p. 347–354.

PHYTOLACCA, N. F.

Brown, E. D., and Anderson, D. D.: The acrid taste of phytolacca is demonstrated to be due to the raphides of calcium oxalate which are present.—J. Pharmacol. 1918, v. 12, p. 37.

PILOCARPINÆ HYDROCHLORIDUM.

Lefeldt, M.: The color test obtained with fuming nitric acid is stated to be of little value for the identification of pilocarpine. It is recommended that this test be dropped from the Ph. Germ.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 180.

Friedman, G. A.: A report on the experimental production of lesions, erosions, and acute ulcers in the mucosa of the stomachs of rabbits by repeated injections of pilocarpine and adrenaline.—J. Med. Res. 1918, v. 38, p. 449–463.

PILOCARPUS.

Éwe, George E.: From experiments it is concluded that the best indicators for the titration of the alkaloids of pilocarpus are methyl red and cochineal.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 163.

PILULÆ.

Anon.: A formula, with directions, for the preparation of permanent and resorbable corrosive sublimate pills is given.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 484–485.

Lehmann, F.: The application of the distillation method (distillation of $AsCl_3$) to the determination of arsenic in iron arsenic pills is described.—Arch. Pharm. 1917, v. 255, p. 305–307, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 579.

PILULÆ FERRI CARBONATIS.

McNulty, W. P.: Changes in the U. S. P. formula for the preparation of Blaud's pills are suggested.—Proc. New York Pharm. Assoc. 1918, p. 284–286.

Snapp, E. L.: Of 11 samples of Blaud's pills examined, 6 were rejected because they did not comply with the U. S. P. requirements.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

PIMENTA, N. F.

Bachmann, F. M.: Data obtained in a study to determine the value of allspice as a preservative are given.—J. Ind. & Eng. Chem. 1918, v. 10, p. 121–123.

PINUS ALBA, N. F.

Anderson, George A.: Three lots of white-pine bark examined contained from 20 to 40 per cent of outer bark.—Proc. N. W. D. A. 1918, p. 235.

PIPER.

Tunmann, O.: Contributions to applied plant microchemistry. XV. A method for the identification of pepper by means of its piperine content is described.—Apoth.-Ztg. 1918, v. 33, p. 353, through Chem. Zentralbl. 1918, v. 89, part 2, p. 675.

Huse, Harold: A report on the chemical examination of commercial samples of white and black pepper and allspice.—Svensk. kem. Tidskr. 1918, v. 30, p. 227–233 and 239–246.

van der Harst, J. C., and Koers, C. H.: Some of the powdered pepper on the market in Holland is reported to yield as high as 30 per cent of ash and to be adulterated with wheat or rye flour and arrowroot.—Pharm. Weekblad, 1918, v. 55, p. 578–579.

Eder, R.: The use of Massoi bark from New Guinea as a substitute for pepper is reported.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 49–52.

PIX LIQUIDA.

Dezani: Reactions of vegetable tar and tar water, with special reference to the Ph. Ital., are described. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 229.

Spalteholz, W.: A description of a method for the determination of the water content of tar. Illustrated.—Chem. Weekblad, 1918, v. 15, p. 1546–1548.

PIX LITHANTHRACIS, N. F.

Reynolds, Clayton W.: A brief note on the history and production of coal tar.—Canadian Chem. J. 1918, v. 2, p. 81–82.

Anon.: A book notice calls attention to a volume by G. Malatesta entitled *Le goudron et ses dérivés*.—Chem. Abstr. 1918, v. 12, p. 2434.

Spielmann, Percy E.: A review of the various chemical compounds found in coal tar and of their principal properties, reactions, and commercial uses.—Gas J. 1918, v. 143, p. 65–67, 114, 160, through Chem. Trade J. 1918, v. 62, p. 471–472, 489–490, 509–510; v. 63, p. 3–5.

Marcusson, J.: Analytical data relative to the composition of coal tar, coal-tar pitch, lignite pitch, etc., are given.—Ztschr. angew. Chem. 1918, v. 31, part 1, p. 113–115, 119–123, through J. Soc. Chem. Ind. 1918, v. 37, p. 403–404A.

Myhill, A. R.: A procedure for the determination of the specific gravity of tar and similar substances is described.—Gas J. 1918, v. 143, p. 254, through Chem. Abstr. 1918, v. 12, p. 2433.

Weiss, J. M.: The methods used by the Barrett Co. for the sampling and analysis of crude tars are described in detail. Illustrated.—J. Ind. & Eng. Chem. 1918, v. 10, p. 732–738, 817–823.

PLUMBI ACETAS.

Osaka, Tuckichi and Hara, Reijiro: The solubility of lead acetate in pure water is found to be 54.38 parts per 100 of water at 25° C., 87.77 at 35° C., and 154.25 at 45° C.—Mem. Coll. Sci. Kyoto, 1917, v. 2, p. 147–150, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 153.

Roberts, J. G.: One lot of powdered lead acetate examined was not of U. S. P. quality, as it contained an excess of carbonate and was considerably effloresced.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 104.

Flint, Wesley P.: A solution of lead acetate is stated to be useful for the destruction of chinch bugs.—J. Econ. Entomology, 1918, v. 11, p. 186–188.

PLUMBI OXIDUM RUBRUM, N. F.

Rowe, C. A.: British patent No. 108735. Red lead is prepared in an oven by stirring and turning over PbO or white lead. The oven may be heated either externally or internally.—Chem. Abstr. 1918, v. 12, p. 97.

Anon: Tentative methods for the routine analysis of dry red lead are described.—Proc. Am. Soc. Testing Mat. 1917, v. 17, part 1, p. 796–801, through Chem. Abstr. 1918, v. 12, p. 313.

PODOPHYLLUM.

Russell, G. A.: A study of the resin content of *Podophyllum peltatum* in relation to the time of harvesting the drug.—Am. J. Pharm. 1918, v. 90, p. 8–15.

Éwe, George E.: In order to avoid loss of resin in the assay of mandrake, it is recommended that the acidified water be poured into the concentrated alcoholic extract instead of the reverse, as directed in the U. S. P. IX.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 163–164.

Westman, L. E., and Rowat, R. M.: The manganese content of podophyllum, computed on a dry basis at 110° C., is given as 0.0052 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

POTASSII BICARBONAS.

Bruhns, G.: The conclusion of Winkler to the effect that potassium bicarbonate is a trustworthy analytical standard for all but extremely accurate work is confirmed.—Chem. Ztg. 1917, v. 41, p. 386–388, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 419.

POTASSII BITARTRAS.

Tobler, H.: United States patent No. 1278257. Cream of tartar is prepared by allowing sulphuric acid to act upon calcium tartrate and wine lees at about 60° C. The solution is filtered and the free tartaric acid is converted into potassium bitartrate.—Chem. Abstr. 1918, v. 12, p. 2404.

Jones, A. J.: The Ph. Brit. test for lead in potassium bitartrate will not give accurate results when applied to the impure product now on the market because of the presence of large amounts of calcium and iron salts insoluble in ammonia. More satisfactory methods are described.—Chem. & Drug. 1918, v. 90, p. 375.

Todd, A. R.: All samples of potassium bitartrate examined proved to be of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 87.

POTASSII BROMIDUM.

Kellner, Georg: The melting point of anhydrous potassium bromide is given as 730° C.—Ztschr. anorg. Chem. 1917, v. 99, p. 137–183, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 469.

POTASSI CARBONAS.

Scholes, S. R.: British patent No. 117755 describes the preparation of potassium carbonate from minerals, such as feldspar.—Chem. Abstr. 1918, v. 12, p. 2668.

Belloni, E.: The causticization of potassium carbonate by means of lime is described.—Ann. chim. applicata, 1918, v. 9, p. 115–149.

Roberts, J. G.: One lot of potassium carbonate examined was 5 per cent low in strength, contained a trace of earthy impurities and was dirty. It contained practically no sodium when tested quantitatively and a normal amount of arsenic, according to the general test of the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

POTASSII CHLORAS.

Enz, K.: The following is recommended as a test for the presence of bromates to be included in the next edition of the Ph. Germ.: a solution of potassium chlorate (2:100) to which is added a solution of potassium iodide (10:100) and a small quantity of starch solution should not develop more than a faint color in ten minutes.—Südd. Apoth.-Ztg. 1918, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 351.

Kohn-Abrest, E.: A table is given comparing the amount of arsenic in samples of so-called pure potassium chlorate during the years 1916–1918.—Rev. prod. chim. 1918, v. 21, p. 199–202, 214–216.

Anon.: In an investigation of ammunition troubles it was found that the potassium chlorate used in making the ammunition contained a small quantity of potassium bromate.—Proc. U. S. Nav. Inst. 1917, v. 43, p. 2313, through Chem. Abstr. 1918, v. 12, p. 225.

Anon.: A discussion of chlorates as fire and accident hazards.—Travelers Standard, 1918, v. 6, p. 110–116, through Chem. Abstr. 1918, v. 12, p. 2442.

POTASSII CHLORIDUM, N. F.

Tschirner, F.: U. S. patent No. 1254450 describes the preparation of potassium chloride from glauconite. The ore is subjected to a roast with CaO and $Ca(OCl)_2$ and the potassium chloride leeched out.—Chem. Abstr. 1918, v. 12, p. 748.

Cox, A. B.: U. S. patent No. 1252784. Potassium chloride containing sodium carbonate, sulphate, borate, or chloride is purified by treating with a solution of calcium chloride which precipitates the impurities.—Chem. Abstr. 1918, v. 12, p. 748.

Enz, K.: It is recommended that a test for the presence of bromides in potassium chloride be introduced into the new edition of the Ph. Germ.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 351.

Rodebush, W. H.: The thermodynamic equations, developed from the equation of Duhem, which are necessary for the calculation of the free energy of solution, are given and their applicability illustrated by the calculation of the free energies of solution of potassium and sodium chloride.—J. Am. Chem. Soc. 1918, v. 40, p. 1204–1213.

POTASSII HYDROXIDUM.

Anon.: A process for preparing potassium or sodium hydroxides from their respective carbonates and Fe_2O_3 is described in detail.—Chem. Trade J. 1917, v. 61, p. 322.

Belloni, E.: The preparation of potassium hydroxide by the causticization of potassium carbonate with lime is described.—Ann. chim. applicata 1918, v. 9, p. 115–149.

Kohn-Abrest, E.: A table is given comparing the amount of arsenic present in samples of so-called pure potassium hydroxide examined during the years 1916–1918.—Rev. prod. chim. 1918, v. 21, p. 199–202, 214–216.

POTASSII IODIDUM.

Buchholtz, J.: An experimental study of the absorption of iodides from the digestive tract.—Ugeskrift for Laeger, 1918, v. 80, p. 139, through J. Am. M. Assoc. 1918, v. 70, p. 1200.

Anon.: Chloral hydrate, when warmed with solutions of potassium iodide, causes the liberation of iodine.—Südd. Apoth.-Ztg. 1918, v. 58, p. 259, through Pharm. Zentralh. 1918, v. 59, p. 245.

Findlater, Miss: A note calls attention to the liberation of iodine in mixtures containing potassium iodide and spirit of ether. No iodine is liberated if the ether used in preparing the spirit is free from peroxide.—Pharm. J. 1918, v. 101, p. 292.

POTASSII NITRAS.

Roberts, J. G.: Two lots of potassium nitrate examined were of U. S. P. quality except that they were yellow in color.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

POTASSII PERMANGANAS.

Anderson, George A: One shipment of potassium permanganate examined contained pieces of ferric oxide.—Proc. N. W. D. A. 1918, p. 230.

Engelhardt, H.: One shipment of potassium permanganate examined contained manganese oxide and another assayed only 26 per cent of absolute salt.—Proc. Maryland Pharm. Assoc, 1918, p. 81.

Ewe, G.: Three lots of potassium permanganate examined were rejected because they contained excessive water-insoluble matter.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

Anderson, George A.: Two shipments of potassium permanganate examined did not comply with the U. S. P. strength requirements of not less than 99 per cent, as they contained only 96.7 per cent and 97.93 per cent of potassium permanganate. They were also of undesirable appearance and were not of a dark purple color as required.—Proc. N. W. D. A. 1918, p. 232.

Belin: A new method of general chemotherapy—oxydotherapy. Good results following the intravenous injection of potassium permanganate in tetanus, glanders, typhoanemia, etc., are reported.—Compt. rend. acad. sc. 1917, v. 165, p. 1074–1076; Compt. rend. soc. biol. 1918, v. 81, p. 172–174.

PRUNUS VIRGINIANA.

Farwell, O. A.: The proper botanical designation for the tree producing wild cherry bark is *Prunus virginiana* Linné.—Drug. Circ, 1918, v. 62, p. 536.

PULSATILLA, N. F.

Shafor, H. A.: Notes on the therapeutic uses of pulsatilla.—Nat. Eclect. M. Assoc. Quart. 1918, v. 10, p. 340–342.

PULVERES.

Raubenheimer, Otto: A foot powder proposed for the A. Ph. A. Recipe Book consists of equal parts of compound talc powder and powdered asbestos.—Drug. Circ. 1918, v. 62, p. 552.

Bazin: Vincent's powder (10 parts of chlorinated lime and 90 parts of boric acid) is stated to be superior to tincture of iodine and more effective than iodoform as a wound dressing.—J. pharm. et chim. 1918, v. 17, p. 314.

Anon.: Pulvis Rhei Tartarisatus vel Digestivus is composed of equal parts of powdered rhubarb, powdered orange peel, and potassium tartrate.—Pharm. Weekblad, 1918, v. 55, p. 80.

Anon.: Pulvis Antiasthmaticus contains the following: Stramonium leaves, 45 parts; belladonna leaves, 20 parts; henbane leaves, 20 parts; potassium nitrate, 10 parts; potassium carbonate, 0.1 part; and sugar, 0.4 part.—Pharm. Weekblad, 1918, v. 55, p. 79. See also ibid., p. 80.

Ewe, George: Analysis of a scalp-drying powder showed it to be composed of equal parts of magnesium sulphate and borax.—Proc. Pennsylvania Pharm. Assoc., 1918, v. 41, p. 165.

PULVIS GLYCYRRHIZÆ COMPOSITUS.

Enz, K.: The new edition of the Ph Germ. should include methods for the determination of sulphur, extract, ash, sand, and water in compound licorice powder.—Sudd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 352.

PYRETHRUM.

Faes, H.: Notes on the cultivation of pyrethrum and the preparation of the powder.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 429–431, 447–450.

Thibault, J. P.: Powdered weeds and grasses are stated to be satisfactory substitutes for pyrethrum powder when intended for use as a larvicide. The action is purely mechanical.—J. Am. M. Assoc. 1918, v. 70, p. 1215.

QUASSIA.

Casparis, P.: A study of the anatomy of simarubaceae barks, with special reference to the barks of commerce.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 13–18, 25–28, 37–42, 57–61, 65–71, 88–93, 97–104, 109–115, 121–126, and 133–141.

QUERCUS, N. F.

Anon.: The thickness requirement of the Ph. Germ. for quercus is too severe. Instead of 1 to 2 mm., a thickness of 1 to 3 mm. should be permitted.—Mitt. Caesar and Loretz, through Pharm. Zentralh. 1918, v. 59, p. 28.

Tunmann, O.: It is recommended that the ferric chloride reaction for quercus be placed under microscopic tests in the new edition of the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 307.

QUILLAJA, N. F.

Tunmann, O.: Microchemical reactions of quillaja with sulphuric acid or with ferric-chloride-sulphuric acid should be included in the new edition of the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 307.

QUININA.

Memminger, Lucien: An account of the manufacture of quinine in southern India.—Com. Rep. 1918, No. 46, p. 726–727.

Anon.: Java exported 131,518 kilos of quinine in 1917 and 114,573 kilos in 1916.—Chem. & Drug. 1918, v. 90, p. 577.

Anon.: During 1916 the United States imported 8,734 pounds of quinine from Java as compared with 88,233 pounds in 1917.—Chem. & Drug. 1918, v. 90, p. 991.

Rabe, Paul and Kindler, Karl: An account of the partial synthesis of quinine from "chinicin."—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 466–467.

Salomon, Hans: By using bromine water instead of chlorine water the sensitiveness of the thalleioquinine reaction is greatly increased. By this means one part in 40,000,000 can be detected.—Ber. deutsch. pharm. Gesellsch., 1918, v. 28, p. 273–275.

Anderson, George A.: A large number of shipments of quinine sulphate and other salts have been tested and all found to be of satisfactory quality.—Proc. N. W. D. A. 1918, p. 240.

van Buskirk, L. H.: Of 3 samples of quinine examined, 1 was rejected, as it did not comply with the U. S. P. requirements.—Ohio Public Health J. 1918, v. 9, p. 44.

Samaja, N.: A report of cases of purpura following the administration of quinine.—Gazzetta degli Ospedali e delle Cliniche, 1918, v. 39, p. 35, through J. Am. M. Assoc. 1918, v. 70, p. 1267.

van der Horst, C. E.: A report of a case in which the administration of quinine brought on symptoms like those of blackwater fever, with the exception that blood did not pass into the urine.—Nederl. Tijdschr. v. Geneesk. 1918, v. 2, p. 798, through J. Am. M. Assoc. 1918, v. 71, p. 2032.

Hartmann, Heinz and Zila, Loro: A report of researches to determine the fate of quinine in the organism. At most 40 per cent is excreted in the urine and feces. As the remainder is not deposited in the organs, it is concluded that it is destroyed.—Arch. exper. Path. u. Pharmacol. 1918, v. 83, p. 221–234.

Schaeffer, Hans: Experimental data showing the disinfectant action of quinine derivatives on diphtheria bacilli are reported.—Biochem. Ztschr. 1917, v. 83, p. 269–314, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 93.

Solis-Cohen, S. et al.: A study of the influence of quinine and urea hydrochloride and other cinchona derivatives on the toxic substances from virulent pneumococci and pneumonic lungs.—J. Infect. Dis. 1918, v. 22, p. 476–491.

Rogers, L.: Notes on quinine prophylaxis in malaria. The principles of its successful use are stated.—Indian Med. Gazette, Calcutta, 1918, v. 53, p. 249, through J. Am. M. Assoc. 1918, v. 71, p. 1251.

Treadgold, C. H.: Quinine in small doses, if not continued for too long a period, is found to be a valuable prophylactic for malaria.—Brit. M. J. 1918, v. 1, p. 525–529.

Traubet, L.: A discussion of the value of *Marrubium vulgare* as a substitute for quinine in the treatment of fevers.—Bull. sc. pharmacol. 1918, v. 25, p. 342–344.

QUININÆ HYDROBROMIDUM.

Knowles, R.: The administration of quinine hydrobromide intravenously is stated to give satisfactory results in malaria.—Indian J. Med. Res. 1918, v. 5, p. 463 through J. Am. M. Assoc. 1918, v. 70 p. 1637.

RENNINUM, N. F.

Engelhardt, H.: In regard to the curdling power of rennet, it is suggested that more detailed directions for the assay process, especially in regard to the absence of preservatives in the milk used for testing rennet, be given.—Proc. Maryland Pharm. Assoc. 1918, p. 81.

Clark, Janet H.: An investigation of the photochemical effect of certain fluorescent substances on rennin. They were found to have a destructive effect in the sunlight.—Am. J. Physiol. 1918, v. 47, p. 251–264.

Éwe, George E.: Data showing the effect of sodium chloride and of sodium nitrate on the activity of pancreatin, diastase, and rennin are given.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 173–174.

Éwe, G.: Seven lots of rennin examined assayed as follows: 1 to 10,500, 1 to 12,500, 1 to 15,625, 1 to 16,666, 1 to 16,666, 1 to 26,000, and 1 to 41,000.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

Roberts, J. G.: One lot of rennin tested according to the N. F. method was rejected because its coagulating power was less than one-half of that claimed on the label.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 106.

Anderson, George A.: Very little rennin has been available this year, but its place has been taken in the manufacture of cheese by special grades of pepsin prepared for this purpose. This has proved to be entirely satisfactory.—Proc. N. W. D. A. 1918, p. 240.

RESINA.

Dufrenoy, J.: An attempted explanation of the origin of resins in the pine.—Rev. gen. sci. 1918, v. 29, p. 3, through Bull. Agric. Intelligence, 1918, v. 9, p. 549.

Anon.: An account of the production of turpentine oil and rosin in India.—Bull. Imp. Inst. 1917, v. 15, p. 544–568.

Schwalbe, G. G., and Schulz, W.: Seasoning renders the resin in pine wood insoluble to a great extent and the longer the wood is kept, the smaller is the quantity of resin which can be extracted. This fact explains the varying quantities of fat recorded as being present in the resin.—Ztschr. angew. Chem. 1918, v. 31, p. 125–127, through J. Soc. Chem. Ind. 1918, v. 37, p. 432A.

Schaefer, W.: A process for the recovery of rosin from pine scrapings is described.—Chem. Umschau, 1918, v. 25, p. 25–26. Ztschr.

angew. Chem. 1918, v. 31, Ref. 308, through J. Soc. Chem. Ind. 1918, v. 37, p. 775A.

Fahrion, W.: Data obtained in the analysis of pine rosin are given.—Chem. Umschau Fette, Oele, Wachse, Harze, 1918, v. 25, p. 3–5, through Chem. Abstr. 1918, v. 12, p. 2696.

Paul, L.: The colloidal nature of colophony. The nature of colophony is discussed with reference to the various products which are obtained by the action of acids on its solutions in alkalies.—Kolloid-Ztschr. 1917, v. 21, p. 115–124, 148–154, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 25.

Johansson, David: Researches on the chemical constitution of abietic acid obtained from American colophony.—Arkiv Kem., Min. och Geol. 1917, v. 7, No. 19, through Chem. Zentralbl. 1918, v. 89, part 2, p. 1028–1029.

RESINA PODOPHYLLI.

Russell, G. O.: Data showing the effect of time of collection of *Podophyllum peltatum* on the yield of resin are reported.—Am. J. Pharm. 1918, v. 90, p. 8–15.

Dott, D. B.: A test for distinguishing between the resins of *Podophyllum peltatum* and *P. emodi* is based on the difference in their behavior toward a solution of ammonia.—Pharm. J. 1918, v. 101, p. 318–319.

RESINA SCAMMONII.

Éwe, G.: One lot of scammony resin examined contained only 90.5 per cent of ether-soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 107.

RESORCINOL.

Boeck: A report of a fatal case of poisoning in a sixteen-year-old boy due to the external application of a gelatin paste containing resorcin.—Zentralbl. ges. Therap. 1916, p. 26, through Pharm. Zentralh. 1917, v. 58, p. 215.

RHEUM.

Semmel, A.: An investigation of the properties of Chinese rhubarb cultivated in Russia. The cultivated rhubarbs are stated to be richer in hydroxymethylanthraquinones, and to be more valuable on account of their higher content of anthra glucosides.—Arch. Pharm. 1918, v. 256, p. 91–102.

Bohrisch, P., and Kürschner, F.: A comprehensive article dealing with the classification of the different sorts of rhubarb, methods for their evaluation, and methods for the detection of impurities.—Apoth.-Ztg. 1916, v. 31, Nos. 96–98, through Pharm. Zentralh. 1917, v. 58, p. 163–165.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the new edition of the Ph. Germ. include the Juillet test for the detection of rhapontic root in powdered rhubarb.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 207–208.

Tunmann, O.: A method for distinguishing between Austrian (Rhapontic) and Chinese rhubarb is described. A table is given showing the difference in the behavior of the two varieties toward various chemical reagents.—Pharm. Post, 1918, v. 51, p. 605–606.

Arzberger: A test for the detection of turmeric in powdered rhubarb is based on the formation of a red color with boric acid.—Pharm. Zentralh. 1917, v. 58, p. 163; Schweiz. Apoth.-Ztg. 1918, v. 56, p. 144.

Kofler, L.: A discussion of microchemical methods for the detection of hydroxymethylanthraquinone in rhubarb.—Ztschr. österr. Apoth.-Ver. 1918, v. 56, p. 231–232, through Chem. Zentralbl. 1918, v. 2, p. 676.

Westman, L. E., and Rowat, R. M.: The manganese content of rhubarb root, computed on a dry basis at 110° C., is given as 0.0036 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

Hankey, Wm. T.: The ash content of 4 samples of rhubarb examined varied from 8.9 to 10.4; the alcohol-soluble material from 29.9 to 33.3.—Proc. Ohio Pharm. Assoc. 1918, p. 132.

SABAL.

Farwell, O. A.: The original spelling (*Serenaea*) of the generic name has been adopted in Engler and Prantl's *Pflanzenfamilien* and should be taken up.—Drug. Circ. 1918, v. 62, p. 536.

SACCHARUM.

Farwell, O. A.: The proper designation for the botanical source of the sugar beet is *Beta vulgaris* Linné, var. *altissima* (Rossig) J. A. Schultes.—Drug. Circ. 1918, v. 62, p. 536.

Martineau, G.: An account of the history of sugar from 1856 to the present time.—J. Roy. Soc. Arts, through Chem. News, 1918, v. 117, p. 359.

Andrews, Frand: Sugar supply of the U. S. Statistics are given on the production of cane sugar in Cuba, Hawaii, Porto Rico, and the Philippines, and on the importation, production, and consumption of cane and beet sugar in the U. S.—Year Book, U. S. Dept. Agric. 1917, p. 447–460.

Wimmer, Curt P.: An article enumerating and describing emergency substitutes for sugar, syrup, and glycerin.—Pract. Drug. 1918, v. 36, No. 3, p. 43–46.

Moore, Wm. C., and Davis, J. B.: A description of a gas dilatometer for ascertaining decomposition points. The decomposition point of sucrose determined with this apparatus was found to be about 178° C.—Met. Chem. Eng. 1918, v. 18, p. 301–302.

Owen, W. L.: An extensive chemical and bacteriological study of the probable factors entering into the deterioration of sugar in storage.—Louisiana Planter, 1918, v. 61, p. 91–94, 107–109, through Chem. Abstr. 1918, v. 12, p. 2057. See also van der Linden, Arch. Suikerind. 1916, v. 24, p. 1793–1800.

Saillard, Emile: A discussion of the fundamental analytical methods employed in sugar chemistry.—Mon. sci. 1918, v. 8, p. 169–175.

Vermehren, A.: The application of Blacher's potassium palmitate solution to the determination of the lime content of beet sugars.—Ztschr. angew. Chem. 1918, v. 31, part 2, p. 81, through J. Soc. Chem. Ind. 1918, v. 37, p. 386A.

Ogilvie, J. P. and Linfield, J. H.: The following methods for the determination of ash in cane and beet sugar were investigated: sulfation, direct incineration after leaching out the alkali salts, direct incineration in the presence of alkali salts.—Intern. Sugar J. 1918, v. 20, p. 114–117.

van der Linden, T.: Attention is directed to the effect of suspended solids on the colorimetric determination of sugar.—Arch. Suikerind. 1916, v. 24, p. 1871, through Chem. Abstr. 1918, v. 12, p. 1259.

Saillard, E.: The influence of acids on the rotatory power of saccharose and invert sugar in the presence of soluble salts.—Moniteur scient. 1917, v. 7, part 2, p. 196–197, through Chem. Zentralbl. 1918, v. 89, part 1, p. 417.

Rose, Anton R.: A description of a method for the inversion and determination of cane sugar. The inversion is brought about by heating in a solution of picric acid and the invert sugar formed is determined by a modified Lewis-Benedict colorimetric method.—Proc. Soc. Exper. Biol. & Med. 1917, v. 15, p. 16–17.

Lo Monaco, Domenico: Subcutaneous injections of sucrose diminished the bronchial secretion in advanced stages of tuberculosis. A diminution of coughing and night sweats occurred simultaneously.—Arch. farmacol. sper. 1918, v. 25, p. 1–11. See also Lucherini, ibid. p. 99–145.

Morriphy, Camillo B.: An investigation of the hemostatic action of sugars applied directly to wounds.—Arch. farmacol. sper. 1917, v. 24, p. 129–149.

SACCHARUM LACTIS.

Haworth, Walter N. and Leitch, Grace C.: A report of investigations on the constitution of the disaccharides. II. Lactose and melibiose.—J. Chem. Soc. Lond. 1918, v. 113, p. 188–199.

Smits, A. and Gillis, J.: Researches on the anhydrides of milk sugar. Data are given showing the final solubility curves of the

α and β anhydride and their melting points.—Proc. Acad. Sci. Amsterdam, 1918, v. 20, p. 520–532 and 573–580, through Chem. Abstr. 1918, v. 12, p. 1385.

Grossfeld, J.: A description of a new procedure for the determination of lactose in mixtures with saccharose and invert sugar. The method is based on the high dextrorotary power of lactose in comparison with invert sugar.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 35, p. 249–256, through Chem. Zentralbl. 1918, v. 89, part 2, p. 406.

Thurston, Azor.: The ash content of four samples of milk sugar examined varied from 0.010 to 0.040.—Proc. Ohio Pharm. Assoc. 1918, p. 133.

SAL CAROLINUM FACTITIUM, N. F.

Anon.: It is recommended that the new edition of the Ph. Germ. include tests for the purity of artificial Carlsbad salt.—Pharm. Zentralh. 1918, v. 59, p. 212.

SANTALUM ALBUM, N. F.

Anon.: The Mysore Government has prohibited the sale of sandalwood from the Mysore forests. the entire production being reserved for the preparation of the oil at the Government factory.—Chem. & Drug. 1918, v. 90, p. 677.

Anon.: A report of researches on the coloring matters present in Sanderswood, barwood, and camwood.—J. Chem. Soc. Lond. 1918, v. 113, p. 125–140.

SANTONINUM.

Farwell, O. A.: *Artemisia maritima* Linné, var. *stechmanniana*, Besser is thought to be a better name for the source of the plant yielding santonin than that given in the U. S. P.—Drug. Circ. 1918, v. 62, p. 536.

Cusmano, G.: Oxidation of santonin by means of perbenzoic or peracetic acids yields isoartemisin or δ-oxysantonin and ε-oxysantonin.—Gaz. chim. ital. 1918, v. 48, p. 248–253; Atti accad. Lincei, 1918, v. 27, part 1, p. 117–121.

Hall, Maurice C., and Foster, Winthrop D.: Experiments on animals with various anthelmintics, including santonin, are reported.—J. Agric. Res. 1918, v. 12, p. 397–447.

Davenport, C. J.: The author finds that the Chinese drug, "Shihchüntzu," prepared from the seeds of *Quisqualis indica*, is a satisfactory substitute for the more expensive santonin.—China Med. J. 1918, v. 32, p. 133, through Chem. Abstr. 1918, v. 12, p. 2404.

SAPO.

X-rayser II.: A note correcting some erroneous statements concerning the history of the origin of soap.—Chem. & Drug. 1918, v. 90, p. 589.

Schleimer, A.: A general paper on soaps, describing their manufacture, properties, and uses.—Merck's Rep. 1918, v. 27, p. 15.

Lecoq, Raoul: A discussion of the analysis of sodium and potassium soaps, with a presentation of data obtained in some analyses.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 100–107; 355–357.

Hart, R.: A description of an improved distillation method for the determination of water in soap.—J. Ind. & Eng. Chem. 1918, v. 10, p. 598–599.

Besson, A. A.: The determination of water by distillation with petroleum ether is described. Analytical data are given for soap and cheese.—Collegium, 1918, p. 150–152, through J. Soc. Chem. Ind. 1918, v. 37, p. 488A.

Bonifazi, G., and Rosentheil, E.: A distillation method for the determination of water in soap is described. Analytical data are given.—Mitt. Lebensm. Hyg. 1918, v. 9, p. 155–158.

Bosshar, E., and Comte, F.: A description of a new procedure for the determination of the fatty acids in soap.—Helvetica chim. acta. 1918, v. 3, p. 251–270.

Slack, H. F.: An illustrated description of a modified "Seifenanalysator" for the direct determination of fatty acids in soaps.—Perf. & Ess. Oil Rec. 1918, v. 9, p. 83–86, 109–112.

Voerman, G. L.: An investigation of the various methods for the determination of glycerol in soap. The oxidation method, using potassium dichromate, is perhaps the best method for technical use, although the sample must sometimes be purified first.—Chem. Weekblad, 1918, v. 15, p. 502–508.

Frye, P. J.: An account of the application of the Polenske method to the analysis of soaps and fatty acids.—J. Soc. Chem. Ind. 1918, v. 37, p. 262T.

Erban, F.: In the determination of natural fat in soaps a high result is sometimes obtained due to the solution in the ethereal solvent. This can be avoided by shaking out the ethereal solution with dilute hydrochloric acid.—J. Soc. Leather Trades Chem. 1918, v. 2, p. 29, through Chem. Abstr. 1918, v. 12, p. 1128.

Fortini, V.: A description of a method for the rapid determination of resins in soap. This method is based upon the fact that nitrated resins are insoluble in petroleum spirit.—Ann. chim. applicata, 1918, v. 9, p. 102–108, through J. Soc. Chem. Ind. 1918, v. 37, p. 381A–382A.

Anderson, George A.: One sample of Castile soap examined was undesirable because its iodine number was only 68.7 and because it contained 0.18 per cent more silica and other accidental impurities than the U. S. P. standard of not more than 0.15 per cent.—Proc. N. W. D. A. 1918, p. 232.

van der Harst, J. C., and Koers, C. H.: Some soaps examined contained only 10 to 20 per cent of fatty acids, and one soap powder consisted of a powdered silicate.—Pharm. Weekblad, 1918, v. 55, p. 578–579.

SAPO MOLLIS.

Stemple, Louis: A modified method for the preparation of soft soap is described. By this method heat is not required.—Proc. New York Pharm. Assoc. 1918, p. 293.

Anon.: It is suggested that the following formula for the preparation of potassium soap be introduced into the new edition of the Ph. Germ.: oleic acid, 100 parts; caustic potash, 20 parts; water, 120 parts.—Pharm. Zentralh. 1918, v. 59, p. 212.

Salon, Edward, and Prager, Siegfried: A direct method for the analysis of potassium soaps by means of solvents is described.—Chem. Ztg. 1918, v. 42, p. 463–464, through Chem. Zentralbl. 1918, v. 89, part 2, p. 921.

Éwe, G.: Four lots of soft soap examined were practically neutral, inclining toward acidity, whereas the U. S. P. requires soft soap to be faintly alkaline.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 107.

Anderson, George A.: One sample of soft soap examined was of U. S. P. quality except that it contained 2 per cent more water than the U. S. P. standard of not more than 52 per cent.—Proc. N. W. D. A. 1918, p. 232.

SCAMMONIÆ RADIX.

Englehardt, H.: True scammony being almost unobtainable, *Ipomoea orizabensis* or Mexican scammony, has been used as a substitute. This root, which is official in the British Pharmacopœia, yields a resin which is very closely related to the true scammony resin and differs physically from the resin only in being less soluble in ether.—Proc. Maryland Pharm. Assoc. 1918, p. 80.

Anderson, George A.: One sample of Mexican scammony examined showed a content of 19 per cent resin.—Proc. N. W. D. A. 1918, p. 240.

SCILLA.

Farwell, O. A.: The name of the botanical source of the plant yielding squill should be changed to *Scilla maritima* Linné.—Drug. Circ. 1918, v. 62, p. 536.

SCOPARIUS, N. F.

Valeur, A.: The isolation of two new alkaloids from *Cytisus scoparius* is reported. One of these, like sparteine, is volatile; the other is nonvolatile. The former is called "génistéine" by the author and the latter "sarothamine."—Compt. acad. sc. 1918, v. 167, p. 26–28 and 163–164; Répert. pharm. 1918, v. 29, p. 318–319.

Herzig, J. and Tiring, Gertrud: A chemical study of scoparin, the yellow pigment which occurs with sparteine in *Spartium scoparium.*—Monatsh. Chem. 1918, v. 39, p. 253–267, through Chem. Zentralbl. 1918, v. 89, part 2, p. 633–634.

Ewe, G.: One lot of broom tops examined contained 8 per cent of stems.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 102.

SENEGA.

Roberts, J. G.: One lot of senega examined was unsatisfactory because it contained 30 per cent of stems instead of 5 per cent as required by the U. S. P., and yielded only 0.22 gm. of ether-soluble matter from 5 gms. of drug instead of 0.3 gm. as required.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 107.

SENNA.

Farwell, O. A.: It is thought that the name *Cassia senna* Linné should be used for the Alexandria senna instead of the present U. S. P. designation.—Drug. Circ. 1918, v. 62, p. 536.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the new edition of the Ph. Germ. include Borntraeger's reaction for the detection of adulteration with Palthé senna leaves.—Ber. Deutsch. pharm. Gesellsch. 1918, v. 28, p. 202–203.

Gilg, E.: Notes on the botanical source of Palthé senna. It is stated that the plant yielding this sort of senna is *Cassia holosericea* Fres. (*Cassia pubescens* R. Br., *Cassia Schimperi* Steude).—Pharm. Ztg. 1917, v. 62, p. 91, through Pharm. Zentralh. 1917, v. 58, p. 389.

Wasicky, R.: A note on the identity and source of Folia Sennae Palthé. The botanical source of this substitute for senna is given as *Cassia auriculata* L.—Ztschr. allegm. öesterr. Apoth.-Ver. 1916, p. 410, through Pharm. Zentralh. 1917, v. 58, p. 20. See also Otto Hoyer, Ztschr. allegm. öesterr. Apoth.—Ver. 1918, v. 56, p. 85–86, through Chem. Zentralbl, 1918, v. 89, part 1, p. 1177.

Eder, R.: False senna leaves (Palthé leaves) have been identified as the leaves of *Cassia holosericea* Fres. from the Arabian Red Sea countries. Folia alypi from *Globularia alypum* L. have also been supplied as a substitute for senna leaves.—Schweiz. Apoth.–Ztg. 1918, v. 56, p. 49–52.

Joachimowitz, M.: Samples of senna leaves examined were found to be adulterated with Pathé senna, *S. obovata*, and *Tephrosia apollinea* or other *Tephrosia* species. Less than 5 per cent of Pathé senna can not be detected with certainty by means of Wasicky's test.—Ztschr. österr. Apoth.-Ver. 1918, v. 56, p. 135–136, through Chem. Zentralbl. 1918, v. 2, p. 214.

Kofler, L.: A discussion of microchemical methods for the detection of hydroxymethylanthraquinone, in senna.—Ztschr. österr. Apoth.-Ver. 1918, v. 56, p. 231-232, through Chem. Zentralbl. 1918, v. 2, p. 676.

Enz, K.: Methods for detecting the presence of Palthé leaves are described.—Südd. Apoth.-Ztg. 1918, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 351.

Westman, L. E., and Rowat, R. M.: The manganese content of senna leaves, computed on a dry basis at 110° C., is given as 0.0043 per cent.—J. Am. Chem. Soc. 1918, v. 40, p. 558–562.

Hankey, Wm. T.: The yield of ash of 2 samples of powdered senna leaves was found to be 16 and 17.6 per cent, respectively. Both samples were sandy and the presence of foreign hairs was observed in one.—Proc. Ohio Pharm. Assoc. 1918, p. 130.

SERUM ANTIDIPHTHERICUM.

Zingher, Abraham: Detailed directions are given for the preparation and method of using toxin-antitoxin mixtures for active immunization against diphtheria.—J. Infect. Dis. 1917, v. 21, p. 493–496.

Crawford, Albert C., and Foster, Marjory G.: A résumé of the work done on the chemistry of diphtheria antitoxin, with special reference to its ultimate composition and physiological activity.—Am. J. Pharm. 1918, v. 90, p. 765–782.

Treacy, Alfred J. M.: Notes on the dose of antitoxin in diphtheria. For immunizing purposes, the dose ranges from 500 to 1,000 units for children, and from 1,000 to 6,000 units for adults. The curative dose varies from 15,000 to 35,000 units for children, and from 20,000 to 60,000 units for adults.—New York M. J. 1918, v. 107, p. 1071–1072.

Comby, J.: A discussion of the dosage of antidiphtheric serum in diphtheria.—Presse Médicale, 1918, v. 26, p. 46–47.

SERUM ANTITETANICUM.

Berg, W. N., and Kesler, R. A.: From an investigation of the destructive action of chemical agents on tetanus antitoxin, it is concluded that the antitoxin is probably not a protein.—J. Agric. Res. 1918, v. 13, p. 471–495.

Sherrington, C. S.: Experiments on monkeys to determine the dosage of antitetanus serum and the efficacy of the several routes by which it may be injected are reported.—Lancet (The), London, 1917, v. 2, p. 964–966.

Dyke, S. C.: A report of a case of peripheral nerve lesions after antitetanus serum. Its occurrence in the proximity of the site of three consecutive injections of serum is considered suggestive.—Lancet (The), London, 1918, v. 194, p. 570.

Anon.: Clinical and experimental notes on the use of antitetanus serum.—Lancet (The), London, 1918, v. 194, p. 577–578.

SINAPIS ALBA.

Anon.: The production of mustard seed in Russia is estimated at 35,700 tons in 1916 and 44,700 tons in 1917. About 70 per cent is utilized for the production of fixed oil, 10 per cent for volatile oil, and 19 per cent for ground mustard.—Pract. Drug. 1918, v. 36, No. 4, p. 38.

SODII BENZOAS.

Canals, E., and Serre, J.: Under certain conditions of concentration a precipitate forms in solutions containing strontium bromide and sodium benzoate. Analysis of the precipitate showed it to have the composition $(C_6H_5CO_2)_2Sr.3H_2O$.—Répert. pharm. 1918, v. 29, p. 97–99; Schweiz. Apoth.-Ztg. 1918, v. 56, p. 318–319.

SODII BICARBONAS.

Ricard, F.: French patent No. 20,156 describes the preparation of sodium bicarbonate by heating together ammonium bicarbonate and sodium nitrate at 50° C.—Chem. Abstr. 1918, v. 12, p. 85.

Goto, Kingo: From experiments, it is concluded that sodium bicarbonate given by mouth has the power of diminishing acidosis in experimental nephritis caused by cantharidin, arsenic, diphtheria toxin, and potassium chromate.—J. Exper. Med. 1918, v. 27, p. 413–424.

SODII BORAS.

Harris, H. L.: A review of the early history of borax and its discovery in the U. S.—J. Am. Pharm. Assoc. 1918, v. 7, p. 858–860.

Young, George J.: The colemanite deposits, occurring as veins and beds in the Tertiary lake beds in the Furnace Creek area, are stated to be among the most important deposits of borax in existence.—Eng. Mining J. 1918, v. 105, p. 985–986, through Chem. Abstr. 1918, v. 12, p. 1537.

Funaioli: A description of the utilization of the natural steam from the volcanic area of Tuscany in the manufacture of borax and boric acid. An abstract.—Chem. & Drug. 1918, v. 90, p. 697.

Roberts, W. H., et al.: It is demonstrated that 0.043 per cent of borax is destructive to the growth of wheat or barley and that even 1/10th of this amount exerts a retarding influence.—Analyst, 1918, v. 43, p. 58–59.

SODII BROMIDUM.

Kellner, Georg: The melting point of anhydrous sodium bromide is given as 742° C.—Ztschr. anorg. Chem. 1917, v. 99, p. 137–183, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 469.

Peeters, D.: A note on the taste of sodium bromide.—Boll. chim.-farm. 1918, v. 57, p. 468.

Weld, E. H.: A 25 per cent solution of sodium bromide is recommended for use in roentgenography as it is the least expensive, is readily prepared and sterilized, does not damage the kidney, and casts a clear shadow outlining the entire pelvis and ureter.—J. Am. M. Assoc. 1918, v. 71, p. 1111–1112.

SODII CACODYLAS.

Rupp, E.: A method for the determination of arsenic in sodium cacodylate is described. The material is oxidized with $KMnO_4$ in acid solution, KI is added and the liberated iodine is titrated with tenth normal $Na_2S_2O_3$ volumetric solution.—Arch. Pharm. 1918, v. 256, p. 192–196.

Anderson, George A.: Many samples of sodium cacodylate examined were unsatisfactory on account of a very strong odor and too much color.—Proc. N. W. D. A. 1918, p. 240.

SODII CARBONAS MONOHYDRATUS.

Kohn-Abrest, E.: A table is given comparing the amount of arsenic present in so-called pure sodium carbonate and bicarbonate for the years 1916 and 1917. The Marsh apparatus and methods for determining arsenic are also described.—Rev. prod. chim. 1918, v. 21, p. 199–202 and 214–216.

Parker, L. H.: A report of an investigation to determine the cause of the reaction occasioned by grinding together sodium carbonate and barium sulphate, sodium carbonate and silver nitrate; sodium carbonate and cuprous chloride.—J. Chem. Soc. Lond. 1918, v. 113, p. 396–409.

van der Harst, J. C., and Koers, C. H.: Much of the soda on the market in Holland is stated to consist chiefly of sodium sulphate and chloride.—Pharm. Weekblad, 1918, v. 55, p. 578–579.

SODII CHLORIDUM.

Anon.: A book notice calls attention to a volume by C. J. Werner entitled *A History and Description of the Manufacture and Mining of Salt in New York State*.—Chem. Abstr. 1918, v. 12, p. 1237.

Calkins, J. B.: Salt mining and dressing. A brief history of the salt-mining industry in America.—Eng. Mining J. 1918, v. 106, p. 431-435.

Shippee, Vernon C.: Sodium chloride prepared by adding pure Na to water and neutralizing the NaOH formed with pure HCl was found to contain after 4 crystallizations less than 0.01 per cent of KCl. That prepared from NaOH purified with alcohol contained 0.03 per cent of KCl and a purified C. P. salt from the reagent itself contained 0.07 per cent of KCl.—Chem. News, 1917, v. 116, p. 213-214.

Rodebush, W. H.: The thermodynamic equations, developed from the equation of Duhem, which are necessary for the calculation of free energy of solution, are given and their applicability illustrated by the calculation of the free energies of solution of sodium and potassium chloride.—J. Am. Chem. Soc. 1918, v. 40, p. 1204–1213.

Macfarlan, Donald: A report of a study of the physiological action of sodium chloride.—Hahnemann. Month. 1918, v. 53, p. 238–240.

SODII CITRAS.

Rosenthal, G.: A 3.8 per cent solution of sodium citrate is recommended as a vehicle for antiseptic dressings because it exerts a selective solvent action on morbid secretions and detritus.—L'Union pharm. 1918, v. 59, p. 341.

SODII CYANIDUM.

Sharwood, W. J.: A discussion of the manufacture and uses of sodium cyanide, and descriptions of methods for the determination of Na, CN, K, and sulphide. Data are also given relative to the solubility of sodium cyanide in water and the stability of the solution.—J. Ind. & Eng. Chem. 1918, v. 10, p. 292–295.

Urano, S.: Pure sodium cyanide is prepared by fusing together 100 parts of calcium cyanide, 100 parts of sodium chloride, 50 parts of charcoal, and 30 parts of calcium carbide.—J. Chem. Ind. Tokyo, 1917, v. 20, p. 1309–1341, through Chem. Abstr. 1918, v. 12, p. 1110. See also Chem. Abstr. 1918, v. 12, p. 409, 2285, 2416.

Loevenhart, O. S. et al.: A study of the stimulating effect of sodium cyanide upon the respiration and its clinical application.—Arch. Int. Med. 1918, v. 21, p. 109-129; J. Am. M. Assoc. 1918, v. 70, p. 692.

SODII GLYCEROPHOSPHAS.

Bailly, O.: A brief resume outlining the author's work on the constitution of the glycerophosphates.—Rev. gen. sci. 1918, v. 29, p. 208–213, through Chem. Abstr. 1918, v. 12, p. 1549.

SODII HYDROXIDUM.

Anon.: A process for preparing sodium or potassium hydroxides from their respective carbonates and Fe_2O_3 is described in detail.—Chem. Trade J. 1917, v. 61, p. 322.

Anon.: A continuous process for causticizing soda-ash with lime is described.—Met. Chem. Eng. 1918, v. 18, p. 376–377.

Anon.: Commercial sodium hydroxide sometimes contains aluminum salts as impurities. These are readily detected by means of ammonia in the presence of ammonia chloride.—Pharm. Ztg. 1918, v. 63, p. 306, through Pharm. Zentralh. 1918, v. 59, p. 257.

van Nieuwenburg, C. J.: Data obtained in a quantitative study of the effect of sodium hydroxide on resistant glass are presented.—Chem. Weekblad, 1917, v. 14, p. 1034–1040. See also W. Westcott et al., J. Soc. Glass Tech. 1917, v. 1, p. 144–147, through Chem. Abstr. 1918, v. 12, p. 211.

SODII HYPOPHOSPHIS.

Boyer and Bauzil: A method for the iodometric determination of phosphites and hypophosphites is based on the fact that H_3PO_2 is oxidized by iodine to H_3PO_3 and the latter, upon the addition of sodium bicarbonate, to H_3PO_4.—J. pharm. et chim. 1918, v. 18, p. 321 and 334.

SODII PERBORAS.

For information on the patent literature dealing with the manufacture of sodium perborate, see Chem. Abstr. 1918, v. 12, p. 125, 334, 454, 654, 791, 1023, and 2285.

SODII PHOSPHAS.

H. K. Mulford Co.: The U. S. P. states that sodium phosphate is insoluble in 95 per cent alcohol. Actual experiments carried out in the Mulford analytical laboratories show that U. S. P. sodium phosphate is soluble to the extent of 0.11 gm. in 100 cubic centimeters of 95 per cent alcohol at 25° C. Anhydrous sodium phosphate is soluble to the extent of 0.006 gm. in 100 cubic centimeters of 95 per cent alcohol at 25° C.—Drug. Circ. 1918, v. 62, No. 5, p. 25.

Greenwald, Isidor: Observations on the effect of intravenous injections of some sodium salts, with special reference to the supposed toxicity of sodium phosphate.—J. Pharmacol. & Exper. Therap. 1918, v. 11, p. 281–301.

SODII SALICYLAS.

Dall 'Acqua, G.: A detailed description of the preparation of sodium salicylate by the use of salicylic acid and sodium bicarbonate.—Boll. chim.-farm. 1918, v. 57, p. 82–83, 201–202.

Deutsche Pharmaceutische Gesellschaft: The German pharmacopœia test for the presence of chlorides in sodium salicylate is criticized on the ground that the amount of nitric acid directed to be used is too small.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 203–204.

Currèe: Notes on the solvent properties of sodium salicylate. It is stated to possess the property of holding resinous substances of tinctures in solution in water. An abstract.—Boll. chim.-farm. 1918, v. 57, p. 128.

van Buskirk, L. H.: Of two samples of sodium salicylate examined, one was rejected as it did not comply with the U. S. P. requirements.—Ohio Public Health J. 1918, v. 9, p. 84, 181.

SODII SULPHAS.

Carles, P.: A test for the detection of arsenic in sodium sulphate is described. The test depends on the discoloration by arsenic in the presence of nascent hydrogen of a filter paper previously moistened with mercuric chloride.—Répert. pharm. 1918, v. 29, p. 161–162.

Richards, T. W. and Yngve, V.: The manner in which the solubility of $Na_2SO_4.10H_2O$ may be used in determining temperatures between 15 and 25° C. is described.—J. Am. Chem. Soc. 1918, v. 40, p. 164–174.

SODII SULPHIS EXSICCATUS.

Teague, O.: A stock solution of sodium sulphite for Endo medium is prepared by dissolving 100 grams of the crystalline salt in 900 grams of water and heating for 20 minutes under 15 pounds pressure. This solution when covered with a layer of paraffin can be kept for 3 weeks without undergoing change.—J. Am. M. Assoc. 1918, v. 70, p. 454.

SODII THIOSULPHAS.

Sander: A description of a new volumetric method for the determination of thiosulphate, together with sulphide, and some observations on the determination of thiosulphate when accompanied by sulphite, bisulphite, and sulphide.—Chem. Ztg. 1915, v. 39, p. 945, through Pharm. Zentralh. 1917, v. 58, p. 200.

SPARTEINÆ SULPHAS.

Tunmann, O.: Microchemical methods for the identification of sparteine are described. An account is given of the behavior of sparteine toward the following reagents: Dilute chromic acid, zinc chloride, copper chloride, mercuric chloride, solution of zinc chloride and iodine, and a solution of the bromides of potassium and cadmium.—Apoth. Ztg. 1917, v. 32, p. 100, through Pharm. Zentralh. 1917, v. 58, p. 413–414.

Hinsdale, Albert E.: A report of experiments on human beings with sparteine sulphate.—J. Am. Inst. Homœop. 1918, v. 11, p. 240–245.

SPIRITUS.

Anon.: It is suggested that the new edition of the Ph. Germ. include under spirits tests for acetone and methyl alcohol.—Pharm. Zentralh. 1918, v. 59, p. 213.

SPIRITUS ÆTHERIS NITROSI.

Lefeldt, M.: It is suggested that a few crystals of potassium tartrate be added to spirit of nitrous ether to prevent it from becoming acid on keeping.—Ber. deutsch. pharm. Gessellsch. 1917, v. 27, p. 183.

Frerichs, G., and Mannheim, E.: A method for determining ethyl nitrite in spirit of nitrous ether, using an ordinary burette for the measurement of the gas, is described.—Arch. Pharm. 1918, v. 256, p. 112–118; Chem. Zentralbl. 1918, v. 89, part 2, p. 410–412.

Table showing some of the analytical results reported for spirit of nitrous ether.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Lea, E. J	8	6	Rep. California Bd. Health, 1918, p. 167.
McLaughlin, Allan J	112	58	Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.
Todd, A. R	79	60	Rep. Michigan D. & F. Com. 1918, p. 88.
Jongeward, M	29	22	Special Bull. North Dakota Agric. Exper. Sta. 1918, v. 5, p. 28.
Frary, Guy G	9	6	Rep. South Dakota F. & D. Com. 1918, p. 62.
Anon	12	9	Bull. Vermont Bd. Health, 1918, v. 18, Nos. 3 and 4; v. 19, No. 1.
Do	1	1	Rep. Wyoming D. F. & O. Com. 1918, p. 11.

SPIRITUS AMMONIÆ ANISATUS, N. F.

Enz, K.: The Ph. Germ. requirement that the anisated spirit of ammonium acetate be completely volatile on heating on a water bath can not be realized as nonvolatile polymers of anisol are formed.—Südd. Apoth. Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 351.

SPIRITUS AMMONIÆ AROMATICUS.

Todd, A. R.: Of 19 samples of aromatic spirit of ammonia examined, 4 did not comply with the U. S. P. requirements.—Rep. Michigan D. & F. Com. 1918, p. 87.

Anon.: Two samples of aromatic spirit of ammonia examined proved to be of U. S. P. quality.—Bull. Vermont Bd. Health, 1918, v. 18, No. 4.

SPIRITUS AMYGDALÆ AMARÆ.

Hortvet, Julius: One sample of extract of almond examined was not up to the U. S. P. standard.—Rep. Minnesota D. & F. Com. 1918, p. 65.

SPIRITUS ANISI.

Todd, A. R.: One sample of spirit of anise examined did not comply with the U. S. P. standard for oil content.—Rep. Michigan D. & F. Com. 1918, p. 88.

McLaughlin, Allan J.: Of 41 samples of spirit of anise examined, 9 were not of U. S. P. quality.—Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.

Anon.: Seven samples of spirit of anise examined were below the U. S. P. standard of 10 per cent of oil.—Bull. New Hampshire Bd. Health, 1918, v. 6, p. 24.

Anon.: Three samples of spirit of anise examined proved to be of U. S. P. quality.—Bull. Vermont Bd. Health, 1918, v. 18, No. 3 and 4; v. 19, No. 1.

SPIRITUS CAMPHORÆ.

von Friedrichs, Oscar: The determination of camphor in spirit of camphor by the polarimetric method is recommended as being the most practical.—Svensk farm. Tidskr. 1918, No. 12, p. 197–202.

Pinkhof, J.: A method for the determination of the strength of alcoholic solutions of camphor without the use of a polarimeter is described. From determinations of the specific gravity of various solutions of alcohol and camphor, and the number of cubic centimeters of water required to produce turbidity in such solutions, tables were compiled from which the strength of the camphor solution can be quickly found. The method is illustrated with a numerical table and curves.—Pharm. Weekblad, 1918, v. 55, p. 1386–1387.

Lautenschläger, L.: The camphor content of spirit of camphor is determined by the use of N/1 hydrazine solution.—Arch. Pharm. 1918, v. 256, p. 88.

Bach, Gustav: Of 8 samples of spirit of camphor analyzed for the percentage of camphor and alcohol, 2 contained, respectively, 7.07 and 9 per cent of camphor. Five contained the proper amount of camphor in 100 cubic centimeters of the spirit. One lot assayed 12.4 per cent of camphor. The alcohol content varied from 92.2 per cent to 91.83 per cent by volume.—Proc. Minnesota Pharm. Assoc. 1918, p. 120.

Table showing some of the analytical results reported for spirit of camphor.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Snapp, E. L.	4	1	Proc. Kentucky Pharm. Assoc., 1918, p. 44.
Penniman, W. B. D.	2	....	Rep. Maryland Bd. Health, 1915, p. 174.
McLaughlin, Allan J	94	19	Rep. Massachusetts Dept. Health, 1918, No. 34, p. [illegible]
Todd, A. R.	57	26	Rep. Michigan D. & F. Com., 1918, p. 87.
Bachman, Gustav	8	3	Northwestern Drug., 1918, v. 19, No. 4, p. 53.
Howard, Chas. D	20	12	Rep. New Hampshire Bd. Pharm., 1918, p. 54.
Van Buskirk, L. H	11	1	Ohio Public Health J., 1918, v. 9, p. 44, 84, 134, 181.
Frary, Guy G	14	5	Rep. South Dakota F. & D. Com., 1918, p. 63.
Anon	7	1	Bull. Vermont Bd. Health, 1918, v. 18, Nos. 3 and 4; v. 19, No. 1.

SPIRITUS CINNAMOMI.

Hortvet, Julius: One sample of spirit of cinnamon examined did not comply with the U. S. P. standard for oil content.—Rep. Minnesota D. & F. Com. 1918, p. 65.

SPIRITUS MENTHÆ PIPERITÆ.

Anon.: Thompson's method for determining free and combined menthol in spirit of peppermint is described in detail.—Semi-Ann. Rep. 1917 through Pharm. Zentralh. 1918, v. 59, p. 22.

Table showing some of the analytical results reported for spirit of peppermint.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Lea, E. J.	2	1	Rep. California Bd. Health, 1918, p. 167.
Penniman, W. B. D.	1	....	Rep. Maryland Bd. Health, 1915, p. 174.
McLaughlin, Allan J.	89	8	Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.
Todd, A. R.	15	12	Rep. Michigan D. & F. Com., 1918, p. 87-88.
Hortvet, Julius	5	3	Rep. Minnesota D. & F. Com., 1918, p. 65.
van Buskirk, L. H.	4	4	Ohio Public Health J., 1918, v. 9, p. 44, 84.
Frary, Guy G.	10	6	Rep. South Dakota F. & D. Com., 1918, p. 64.
Anon	7	....	Bull. Vermont Bd. Health, 1918, No. 3 and 4; v. 19, No. 1.

SPIRITUS MYRCIÆ COMPOSITUS, N. F.

Harer, C. R.: The alcohol content of bay rum was determined by 7 different methods, including the method of the U. S. P. Richter's modification of the Thorpe and Holmes method is stated to give the best results.—J. Am. Pharm. Assoc. 1918, v. 7, p. 594–597.

Harms, Herman: Of 26 samples of bay rum examined, the percentage of alcohol varied from traces to as high as 75 per cent by volume. Six samples were not passed, owing to misrepresentation upon the label regarding the percentage of alcohol present or the actual amount of contents.—Rep. Utah D. & F. Com. 1918, p. 62.

Frary, Guy G.: Of 7 samples of bay rum examined, 5 were rejected because they did not answer the U. S. P. requirements.—Rep. South Dakota F. & D. Com. 1918, p. 62.

van Buskirk, L. H.: Of 13 samples of bay rum examined, 9 were not of U. S. P. quality.—Ohio Public Health J. 1918, v. 9, p. 44, 84, 134, and 181.

STRAMONIUM.

Guerin, P.: A paper calling attention to the substitution of the leaves of lampourde (*Xanthium microcarpum* D. C.) for those of *Datura stramonium* L. The morphological characteristics of the former are illustrated and described.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 2–13; Bull. Assoc. Gén. Syn. Pharm. France, 1918, v. 21, p. 180; J. pharm. et chim. 1918, v. 17, p. 102–105.

Roberts, J. G.: Two lots of stramonium leaves examined assayed 0.39 per cent and 0.3 per cent of alkaloids, respectively.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 108.

Engelhardt, H.: Of 10 shipments of stramonium examined, only 1, assaying 0.22 per cent of total mydriatic alkaloids, was rejected.—Proc. Maryland Pharm. Assoc. 1918, p. 83.

STRONTII BROMIDUM.

Meade, Richard K.: Notes on strontium; its occurrence, industrial application, and the manufacture of its salts.—Chem. News, Lond. 1918, v. 117, p. 126–129.

Kellner, Georg: The melting point of anhydrous strontium-bromide is given as 643° C.—Ztschr. anorg. Chem. 1917, v. 99, p. 137–183, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 469.

Canals, E. and Serre, J.: Under certain conditions of concentration, a precipitate forms in solutions containing strontium bromide and sodium benzoate. Analysis of the precipitate showed it to have the composition $(C_6H_5CO_2)_2Sr.3H_2O$.—Répert. pharm. 1918, v. 29, p. 97–99.

STRONTII IODIDUM.

Krahulik, E. J. and Pilcher, J. D.: From experiments it is concluded that the combination of iodine with strontium does not delay the excretion, and therefore, the absorption of iodine over that of sodium and potassium.—Arch. Int. Med. 1918, v. 21, p. 176–180.

STROPHANTHINUM.

Catillon: Priority is claimed in the preparation of strophanthin-ouabin in 1887 from *Strophanthus glabra* by means of 70 per cent alcohol.—Soc. de Thérap. 1917, through J. pharm. et chim. 1917, v. 16, p. 180–181.

Baljet, Henk: Strophanthin can be detected by the orange red color which results from the action of a reagent consisting of a 1 per cent solution of picric acid in 95 per cent alcohol to which has been added a 10 per cent aqueous solution of sodium hydroxide.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 71–73, 84–88.

Holste, A.: Solutions of k-strophanthin (Boehringer) and g-strophanthin (Thomas) which had been kept for varying periods of time were compared with freshly prepared solutions. The k-strophanthin had lost most of its activity after a year, while the solution of g-strophanthin had lost little of its activity after three years.—Ztschr. exper. Path. u. Therap. 1918, v. 19, p. 153–161, through Physiol. Abstr. 1918, v. 3, p. 195.

Straub, Walther: An investigation of the cause for the resistance of the rat to k-strophanthin.—Arch. exper. Path. u. Pharmakol. 1918, v. 84, p. 223–233.

Holste, Arnold: A study of the effects of strophanthin on the heart.—Kolloid-Ztschr. 1918, v. 22, p. 153–161.

Impens, E.: A report of experiments to determine the effect of digitalis, strophanthin and cymarin on the oxydase "granula" of the mammalian heart.—Ztschr. exper. Path. u. Therap. 1917, v. 19, p. 205–210.

STROPHANTHUS.

Anon.: The exports of strophanthus from Nyassland for the year 1916–17 amounted to 22,564 pounds.—Chem. & Drug. 1918, v. 90, p. 233.

Anon.: The U. S. Department of Agriculture reports that some importations of strophanthus seed examined consisted wholly or largely of the seed of *Strophanthus sarmentosus*.—Am. J. Pharm. 1918, v. 90, p. 889.

Bohrisch, P.: An investigation of the various modifications of the sulphuric acid test for strophanthin in strophanthus seeds has led to the recommendation of the following procedure: Thin cross sections of the seeds are placed on an object glass and treated with a little ether to remove the fat; they are then covered with one drop of sulphuric acid which has been diluted with one-fourth of its weight of water. The endosperm and at least the outer portions of the embryo leaves should show a deep green coloration, which is best observed under a low-power microscope or a strong magnifying glass.—Pharm. Ztg. 1918, v. 63, p. 318–319, through J. Soc. Chem. Ind. 1918, v. 37, p. 559A.

Blomberg, J.: A detailed discussion of methods for the identification of strophanthus and its preparations. The article also contains a chart showing the color reactions of the tincture of strophanthus with sulphuric acid.—Pharm. Weekblad, 1918, v. 55, p. 1587–1597.

Sajous, Louis T. deM.: A comparison of the action and effects of strophanthus and its active principles with digitalis. Definite differences in the clinical actions and indications of the two drugs are stated to have been observed.—New York M. J. 1918, v. 108, p. 651–652, 696–697, 870–871, 914, and 958–959.

STRYCHNINA.

Reutter, L.: A preliminary note on the chemical constitution of strychnine.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 650–651.

DeRosemont, L. R.: A contribution to the study of the constitution of strychnine. On submitting a mixture of strychnine and powered zinc to dry distillation under reduced pressure, pyridine, conicine and quinoline were obtained.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 651.

Woeber, A.: A modification of Dowzard's method for determining brucine in the presence of strychnine renders possible the detection of strychnine. Dowzard's reagent is modified by the addition of a small amount of potassium chlorate.—Ztschr. angew. Chem. 1918, v. 31, p. 124, through J. Soc. Chem. Ind. 1918, v. 37, p. 441A.

Berti, Antonio, and Manara, Michele: A second note on the action of strychnine on the motility of the stomach. Experiments on man are reported.—Arch. farmacol. sper. 1918, v. 25, p. 240–256.

STRYCHNINÆ NITRAS.

Hirayama, M. and Sochi, T.: A detailed description of a method for the manufacture of strychnine nitrate from nux vomica.—J. Pharm. Soc. Japan, 1918, No. 436, p. 448–456.

STRYCHNINÆ SULPHAS.

Schulmann, E. and Egret, M. T.: Experiments on frogs show that strychnine sulphate acts more rapidly when given subcutaneously than when given by way of the intestines. In frogs without hepatic function the findings were reversed.—Compt. rend. soc. biol. 1917, v. 80, p. 846–848.

Snapp, E. L.: Of 6 samples of strychnine tablets examined, 1 was rejected because of the low strychnine content.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

STYRAX.

van Itallie, L. and Lemvkes, H. J.: For the evaluation of storax, the determination of the cinnamic acid content is preferred to the acid or saponification values. The method employed for the determination of cinnamic acid content is described in detail. The results of the examination of nine samples of storax are given.—Pharm. Weekblad, 1918, v. 55, p. 142–149; Schweiz. Apoth.-Ztg. 1918, v. 56, p. 286–287.

Engelhardt, H.: The adoption of sweet gum from *Styrax liquidamber* is recommended as a substitute for storax, the latter being unobtainable at this time. Whether or not the drugs exert the same therapeutic action is still an open question, and experiments along this line should be made.—Proc. Maryland Pharm. Assoc. 1918, p. 80.

Armstrong: The acid number of a sample of American styrax offered by an American manufacturer was found to be 41, whereas the Pharmacopœia requires that the official drug shall have an acid number of 56 to 85.—Proc. Am. Drug. Mfg. Assoc. 1918, p. 250.

Anderson, George A.: Many lots of styrax have been examined which are mixtures of tolu, tar, and other materials.—Proc. N. W. D. A. 1918, p. 236.

SUCCUS CITRI, N. F.

Chick, Harriette et al: The antiscorbutic value of lime juice was compared experimentally with that of lemon juice and was found to be distinctly inferior.—Lancet. 1918, v. 2, p. 731–738.

Anderson, George A.: Three samples of lime juice tested showed a content of citric acid of about 8 per cent, which agrees well with the usual content of citric acid.—Proc. N. W. D. A. 1918, p. 239.

SULPHONETHYLMETHANUM.

Ellinger, Alexander, and Riesser, Otto: The porphyrin present in urine after trional poisoning is stated to be identical with that found by Fischer in the urine in a case of congenital hematoporphyrinuria.—Ztschr. physiol. Chem. 1916, v. 98, p. 1–10, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 715.

SULPHONMETHANUM.

Hirayama, M. et al: A description of a method for the manufacture of sulphonal.—J. Pharm. Soc. Japan, 1918, No. 434, p. 248.

Sanchez, Juan A.: Notes on the identification and assay of sulphonal, trional, and tetronal.—Farm. Españ. 1918, v. 50, p. 326–327, 343–344.

SULPHUR PRÆCIPITATUM.

Lefeldt, M.: A criticism of the wording of the Ph. Germ. test for arsenic in precipitated sulphur.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 184.

Roberts, J. G.: Three of 5 lots of precipitated sulphur examined were not as represented. One proved to be washed sulphur and two yielded exceedingly high amounts of ash. One of these lots was of Japanese origin and yielded 46.4 per cent. The other yielded 45.1 per cent, whereas the U. S. P. permits not more than 0.3 per cent.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 108.

SULPHUR SUBLIMATUM.

Hashiride, T., and Takane, T.: Japanese patent No. 32,100. Crude sulphur is melted in four vessels and the vapors are conducted to a receiving chamber equipped with cooling pipes and a mechanism for removing the flowers from the pipes.—Chem. Abstr. 1918, v. 12, p. 2239.

Noyer: An examination of the different varieties of sulphur obtained by condensing sulphur vapors. A good variety of "flowers of sulphur" should contain a maximum of sulphur insoluble in carbon disulphide. A number of commercial samples examined yielded from 13 to 33 per cent of insoluble sulphur. A standard of a minimum of 33 per cent should be set.—Caoutchouc et Gutta-percha, 1918, v. 15, p. 9661–9663.

Beckman, Ernst et al.: An investigation of the influence of different modifications of sulphur on its melting point. The absence of a sharp melting point is said to be due to the presence of the complex molecules S_4 and S_6 in the liquid phase.—Ztschr. anorg. Chem. 1918, v. 103, p. 189–206, through J. Chem. Soc. Lond. 1918, v. 114, part 2, p. 308.

Hayward, Carle R.: Experiments to determine the effect of boiling sulphur on copper showed that the metal was completely converted into sulphide in 4 hours.—Met. Chem. Eng. 1918, v. 18, p. 650–651.

SUPRARENALUM SICCUM.

Kuriyama, Shigenobu: The results obtained in an investigation of the adrenaline content of the suprarenal glands in various experimental conditions are reported. The adrenaline content of the glands kept in the air at room temperature decreased markedly within a few days.—J. Biol. Chem. 1918, v. 34, p. 299–319.

Denigés, G.: Notes on the extension of the Grimbert-Leclère reaction for apomorphine to adrenaline and the morpholic alkaloids.—Bull soc. pharm. Bordeaux, 1918, v. 46, p. 185.

Sampalo, O.: A study of the epinephrine content of suprarenals from the medico-legal standpoint. The epinephrine content of the extract of the suprarenals ranged from 0.50 to 0.16 per thousand in cases of sudden death and from 0.12 to 0.01 per thousand in cases of lingering death.—Brazil Medico, 1918, v. 32, p. 156, through J. Am. M. Assoc. 1918, v. 71, p. 156; Physiol. Abstr. 1918, v. 3, p. 386.

Bray, A. W. L.: A study of the reactions of the melanophores of *Ameiurus* to light and to adrenaline.—Proc. Nat. Acad. Sci. 1918, v. 4, p. 58–60.

Loew, Oscar: An investigation of the character of the toxic action of suprarenine. The free base and the first red oxidation product were found to be extremely toxic. The author ascribes the toxicity to the lability of the hydrogen ions in the molecule, which is especially marked in alkaline solution.—Biochem. Ztschr. 1918, v. 85, p. 295–306, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 281.

Gruber, Charles M.: A study of the effect of adrenaline upon the blood flow in muscles.—Am. J. Physiol. 1918, v. 45, p. 302–313.

Triviño, G.: A report of favorable results following the use of epinephrine in the treatment of asthma.—Revista Ibero-Americana, Madrid, 1918, v. 39, p. 271, through J. Am. M. Assoc. 1918, v. 71, p. 1015.

Hanzlik, Paul: Epinephrine (1 in 1000 and powdered tablets containing 1 milligram) acts as an efficient hemostatic for small and superficial wounds. It appears to be efficient in stopping venous hemorrhage.—J. Exper. Path. and Pharmacol. 1918, v. 10, p. 523–541.

Manie, A.: Experimental evidence is given to show that the subcutaneous administration of adrenaline has no preventive action against tetanus intoxication.—Ann. Inst. Pasteur, 1918, v. 32, p. 97–110.

Lami, Pio: Notes on the preparation of solutions of adrenaline in oil.—Boll. chim.-farm. 1918, v. 57, p. 441–443.

SYRUPUS.

English, W. M.: Formulas for the preparation of simple syrup without the use of sucrose are presented.—Proc. California Pharm. Assoc. 1918, p. 14–15.

Plette, G. W. L.: A report of experiments conducted for the purpose of discovering the cause of the inversion of sugar in syrup.—J. Am. Pharm. Assoc. 1918, v. 7, p. 609–610.

Miller, E. V., and Worley, F. P.: Data are given showing the relation between the degree of supersaturation, the refractive index, and the temperature of sugar solutions.—J. Soc. Chem. Ind. 1918, v. 37, p. 98–103T.

Pellet, H.: Results of experiments are given to show that there is no relation between the purity of sugar syrups and the rate of filtration.—Bull. assoc. chim. sucr. dist. 1917, v. 35, p. 183–186, through Chem. Abstr. 1918, v. 12, p. 1008.

Blake, A. F.: A description of a special "nomen" designed for the purpose of facilitating the calculation of the purity of sugar solutions.—Intern. Sugar J. 1918, v. 20, p. 73–78.

Lajoux, H., and Ronnet, L.: An analytic table is given for syrups. saccharine food products, honeys, etc.—J. pharm. et chim. 1917, v. 16, p. 199–204.

SYRUPUS ACIDI HYDRIODICI.

Jongeward, M.: Five of 15 samples of syrup of hydriodic acid tested contained a smaller amount of hydriodic acid than required by the U. S. P. Six of the samples were above U. S. P. strength.—Special Bull. North Dakota Agric. Exper. Sta. 1918, v. 5, p. 29–30.

Snapp, E. L.: Six samples of hydriodic acid syrup examined complied with the standard for hydriodic acid prescribed by the U. S. P. —Proc. Kentucky Pharm. Assoc. 1918, p. 44.

SYRUPUS CALCII LACTOPHOSPHATIS.

Mueller, Bertha: The following is recommended as a formula for a suitable syrup of calcium lactophosphate: Precipitated calcium carbonate, 25; lactic acid, 60; phosphoric acid, 40; stronger orange flower water, 50; sugar, 650; distilled water to make 1000.—Nat. Druggist, 1918, v. 48, p. 487.

SYRUPUS FERRI IODIDI.

Utech, P. H.: The syrup of ferrous iodide, if made according to U. S. P. directions, will retain its characteristic yellowish-green color almost indefinitely if a small piece of metallic iron be placed in the finished product.—Apothecary, 1918, v. 30, No. 8, p. 24.

Wilkening: Syrup of iodide of iron can be preserved by the addition of 0.05 to 0.1 gram of citric acid to 100 grams of syrup.—Südd. Apoth.-Ztg. 1917, p. 373–383, through Pharm. Zentralh. 1918, v. 59, p. 301. See also Lefeldt, Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 182.

Deutsche Pharmaceutische Gesellschaft: Recommendations are made for changes in the Ph. Germ. method for the preparation of syrup of ferrous iodide and for its preservation.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 208–209.

Penniman, W. B. D.: Of 45 samples of syrup of iodide of iron examined, 4 were not up to the U. S. P. standard for iron.—Rep. Maryland Bd. Health, 1915, p. 174.

Jongeward, M.: Fifteen of 26 samples of ferrous iodide assayed were low in iron iodide content.—Special Bull. North Dakota Agric. Exper. Sta. 1918, v. 5, p. 31.

Frary, Guy G.: One sample of syrup of ferrous iodide examined was of U. S. P. quality.—Rep. South Dakota F. & D. Com. 1918, p. 64.

SYRUPUS IODOTANNICUS, N. F.

Lami, Pio: Notes on the preparation of syrup of iodotannin and closely related preparations.—Boll. chim.-farm. 1918, v. 57, p. 277.

SYRUPUS PRUNI VIRGINIANÆ.

Utech, P. H.: The flavor of the syrup of wild cherry is entirely destroyed in a few months if the syrup is exposed to the light during storage.—Apothecary, 1918, v. 30, No. 8, p. 24.

SYRUPUS RHEI.

Anon.: The following formula for the preparation of syrup of rhubarb is recommended for introduction into the new edition of the German pharmacopœia: Tinctura Rhei aquosa duplex 50 parts, water 10 parts, sugar 129 parts. The syrup may also be prepared by mixing 2 parts of the aqueous tincture of rhubarb with 1 part of simple syrup.—Pharm. Zentralh. 1918, v. 59, p. 213.

SYRUPUS RUBI IDÆI, N. F.

Ziegler, J.: The Ph. Germ. test for aniline dyes in the syrup of raspberry is stated to be valueless, as amyl alcohol is colored slightly red by the pigments naturally present in the unadulterated product.—Apoth.-Ztg. 1918, v. 33, p. 162. See Lefeldt, Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 183.

Broeksmit, T. C. N.: The juice of *Rubus idæus* is stated to contain acetic and citric acids, but no tartaric nor malic acid.—Pharm. Weekblad, 1918, v. 55, p. 1410–1412.

SYRUPUS SCILLÆ COMPOSITUS.

Anon.: A modified U. S. P. method for the compound syrup of squill is described.—N. A. R. D. J. 1918, v. 25, p. 938.

SYRUPUS TOLUTANUS.

Anon.: A stock preparation for making syrup of Tolu is prepared by mixing 1 part of tincture of Tolu with 9 times its volume of lime water, allowing the mixture to stand for 24 hours and filtering. One part of the filtrate is mixed with 9 parts of syrup. An abstract.—Pharm. Weekblad, 1918, v. 55, p. 505.

TALCUM PURIFICATUM.

Enz, K.: A test for the detection of calcium carbonate in talcum should be introduced into the new edition of the Ph. Germ.—Südd. Apoth.-Ztg. 1918, v. 58, p. 208, through Pharm. Zentralh. 1918, v. 59, p. 352.

TARAXACUM.

Rusby, H. H.: As a general thing, American dandelion root is inferior in size and consistence to the European drug, but some of our native supplies have been found to be of superior quality.—Proc. New York Pharm. Assoc. 1918, p. 192.

TEREBINTHINÆ, N. F.

Anon.: The botanical varieties of pine trees yielding turpentine, and the distribution and area of forests of these trees in India are given.—Drugs, Oils and Paints, 1918, v. 34, p. 124.

Tanaka, Y.: An account of the turpentine industry of the United States. The methods of collecting the crude gum and of separating the oil and rosin are discussed.—J. Chem. Ind. Tokyo, 1918, v. 21, p. 5–37, through Chem. Abstr. 1918, v. 12, p. 1120.

Tansz, J.: Methods for the determination of turpentine and the detection of adulterants therein are described.—Chem. Ztg. 1918, v. 42, p. 349–351, through J. Soc. Chem. Ind. 1918, v. 37, p. 554A.

TERPINI HYDRAS.

Aschan, Ossian: Notes on the formation of terpin hydrate from pinene and dipentene.—Bidrag kann. Finlands natur och folk, 1918, v. 77, p. 30, through Chem. Zentralbl. 1919, part 1, p. 284.

TERRA SILICEA PURIFICATA.

Péregrin, J. B.: A review and discussion of the uses of kieselguhr.—Rev. chim. ind. 1918, v. 27, p. 5–7.

Brill, Harvey C.: Experiments are reported to show that infusorial earth extracts the antineuritic principles from an extract of rice polishings. Its use for this purpose is impracticable because of the large quantity necessary.—Philippine J. Sci. 1917, v. 12, p. 199–206.

THEOBROMINÆ SODIO-SALICYLAS.

Dall'Acqua, G.: A method for the preparation of theobromine sodio-salicylate is described. The method includes procedures for the preparation of sodium salicylate and sodium theobromate, from which the final product is obtained under the conditions described.—Boll. chim.-farm. 1918, v. 57, p. 201–202.

Lefeldt, M.: A discussion of the Ph. Germ. method for the determination of theobromine in theobromine sodio-salicylate.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 184–185.

Emery, W. O. and Spencer, G. C.: Studies in synthetic drug analysis. V. A method is described for estimating theobromine, both alone and in combination with sodium acetate and sodium salicylate, based on the formation of its periodide.—J. Ind. & Eng. Chem. 1918, v. 10, p. 605–606.

THYMOL.

Collens, A. E.: The oil distilled from the shoots of *Monarda punctata* was found to contain 44 per cent. of thymol. The yield of oil per 100 pounds of leaf is about 4.34 ounces. A good average crop yields 80 ounces of thymol per acre. Ajowan seed yields 12.4 per cent. of oil containing 3 per cent. of thymol.—West Indian Bull. 1918, v. 17, pp. 50–55, through Physiol. Abstr. 1918, v. 3, p. 471.

Anon.: A note on *Ocymum viride* as a possible source of thymol.—Chem. & Drug. 1918, v. 90, p. 816.

Anon.: Notes on the yield of thymol obtained from ajowan seed grown in Seychelles and Montserrat.—Bull. Imp. Inst. 1918, v. 16, p. 30–32.

Deutsche Pharmaceutische Gesellschaft: The melting point of thymol is stated to lie between 50 and 51° C.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 384.

Prins, G. A.: A note on the toxicity of thymol states that 0.5 to 1.5 grams per day are capable of producing toxic symptoms. Leichtenstern reports a case in which death resulted from the administration of 6 grams at one dose.—Pharm. Weekblad, 1918, v. 55, p. 222.

Nogouchi, R.: A report of a case of thymol poisoning and hemoglobinuria following treatment for hookworm.—Japanese Med. Lit. 1918, v. 3, p. 19, through Chem. Abstr., 1918, v. 12, p. 2020.

Carnot, P.: Daily enemas of thymol in an oil emulsion and also administration by mouth gave good results in the two cases of bilharziasis reported.—Arch. des Maladies de l'Appareil Digestif, 1918, v. 9, p. 661, through J. Am. M. Assoc. 1918, v. 71, p. 1519.

Hall, Maurice C., and Foster, Winthrop D.: Experiments on animals with various anthelmintics, including thymol, are reported.—J. Agric. Res. 1918, v. 12, p. 397–447.

THYMOLIS IODIDUM.

Bougault, J.: A theoretical discussion of the chemical constitution of the aristols based on certain physical and chemical data.—J. pharm. et chim. 1918, v. 17, p. 221–227.

THYMUS, N. F.

Eder, R.: A sample of thyme herb of French origin is reported to have had an odor resembling lavender. As it had the characteristics of true thyme in other respects, it was held to be a chemical variety of the true herb, thymol being replaced to a certain extent by its isomer carvacrol, and linalool being present.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 49–52.

THYROIDEUM SICCUM.

Fenger, Frederic: Experiments show that there is a distinct seasonal variation in the iodine content of the thyroid gland from cattle, hogs, and sheep. The average iodine content of the thyroid is considerably higher in hogs than in cattle and sheep.—Endocrinology, 1918, v. 2, p. 98–100.

Kendal, E. C.: The author has isolated a crystalline compound (thyro-oxyindol) from the thyroid gland. The compound was found to contain 60 per cent of iodine and to have a molecular weight of 586.—Endocrinology, 1918, v. 2, p. 81–93; J. Am. M. Assoc. 1918, v. 71, p. 871–872.

Grobly, W.: Thyroid-nucleoprotein is that constituent of thyroid gland which raises the consistency, decreases the solubility, and prevents the ready absorption of the colloid into the body fluids.—Mitt. Grenzg. Med. Chir. 1918, v. 30, p. 403–471, through Physiol. Abstr. 1918, v. 3, p. 265.

Rogoff, J. M.: A method for the preparation of a soluble concentrated product of the thyroid gland is described. The product obtained contains 13.44 mg. of iodine per gm. of dry substance.—J. Pharmacol. and Exper. Therap. 1918, v. 12, p. 207–209.

Kuzirian, S. B.: Some observations on E. C. Kendall's method of estimating iodine in thyroid preparations.—Proc. Iowa Acad. Sc. 1918, v. 25, p. 495–496.

Van Os, D.: It is stated that unlike most pharmaceuticals, thyroid preparations are not standardized according to any adequate system. The usual plan of stating strength in terms of the weight of the fresh gland, and gaging the dose accordingly is very unreliable because of wide variations in the amount of fat and water in the fresh gland. The Dutch pharmacopœia requirement of 0.4 per cent iodine should be lowered to not more than 0.3 per cent. The most reliable basis for expressing the strength is the weight of the dried fat-free powder.—Pharm. Weekblad, 1918, v. 55, p. 1426–1431.

Swingle, W. W.: From experiments with the larvæ of the common leopard frog and of the toad, the author concludes that iodine is the active principle of the thyroid gland.—Endocrinology, 1918, v. 2, p. 283–288.

Janney, N. W.; Studies of the effects of the thyroid hormone as determined by clinical, metabolic and dietetic investigation. New points of view are expressed on thyroid function in health and disease.—Arch. Int. Med. 1918, v. 22, p. 187–216.

Anon.: A review of a pamphlet by L. Lévi entitled *Des doses en therapeutique thyroïdienne.* This pamphlet recommends the fixing of the dosage of thyroid preparations in all cases because of the fact that good or bad results are dependent upon the dose employed.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 186.

Tracy, Edward A.: A report of a case of suppuration of a goitrous thyroid following the administration of thyroid extract.—Endocrinology, 1918, v. 2, p. 143–144.

TINCTURÆ.

Anon.: Formulas are given for the preparation of the following: Tinctura Antispasmodica Baueri, Tinctura Ferri Aromatica cum Cacao, Tinctura Ferri Aromatica cum Lecithino, Tinctura Mencier, Tinctura Myrrhæ Composita, and Tinctura Stomachica Hoijer.—Pharm. Weekblad, 1918, v. 55, p. 627.

Anon.: It is suggested that the new edition of the Ph. Germ. include under tinctures tests for acetone and methyl alcohol.—Pharm. Zentralh. 1918, v. 59, p. 213.

Lefeldt, M.: A table is given showing the specific gravity at 15° C. and the residue obtained by drying at 100° C. of a number of tinctures of the Ph. Germ. It is recommended that standards of this nature be provided by the new edition of the Ph. Germ. for those tinctures which can not be standardized by chemical or physiological methods.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 188–191.

Eschbaum, Friedrich: A new method for determining the amount of extractive matter in tinctures and fluidextracts consists in dropping a known amount of the material on blotting paper, drying in an oven to remove the solvent, and weighing the remainder.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 417–419.

Reichardt, C. J.: Tinctures of wormwood, orange peel and valerian, when prepared by maceration with equal parts of alcohol and water, were found to contain a larger amount of extractive matter than when prepared according to the method of the Ph. Germ.—Pharm. Ztg. 1918, v. 63, p. 501, through Chem. Zentralbl. 1918, v. 89, part 2, p. 1071.

TINCTURA BELLADONNÆ FOLIORUM.

Hankey, Wm. T.: The alkaloidal content of 4 samples of tincture of belladonna assayed varied from 0.0273 to 0.033. The U. S. P. requires 0.027 to 0.033.—Proc. Ohio Pharm. Assoc. 1918, p. 133.

Snapp, E. L.: Two samples of tincture of belladonna leaves examined came up to the standard for alkaloids prescribed by U. S. P.—Proc. Kentucky Pharm. Assoc. 1918, p. 44.

TINCTURA BENZOINI.

Todd, A. R.: All samples of tincture of benzoin examined proved to be of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 88.

TINCTURA CANTHARIDIS.

Lipsitz Samuel T. et al.: The administration of 15 to 20 drops of tincture of cantharides, by mouth, to rabbits produced polycythemia lasting as long as 8 days. A similar observation was made in a case of cantharides poisoning in a man.—Arch. Int. Med. 1917, v. 20, p. 913–918.

TINCTURA CARDAMOMI.

Mueller, Bertha: Glycerin is considered to be a useless ingredient of tincture of cardamom.—Nat. Druggist, 1918, v. 48, p. 487.

TINCTURA CARDAMOMI COMPOSITA.

Mueller, Bertha: The following formula is suggested for compound tincture of cardamom: Cardamom, 25; caraway, 12; cochineal, 5; spirit of cinnamon, 3; diluted alcohol (49 per cent) to make 1000.—Nat. Druggist, 1918, v. 48, p. 487.

TINCTURA CINCHONÆ.

Mueller, Bertha: Glycerin is considered to be a useless ingredient of tincture of cinchona.—Nat. Druggist, 1918, v. 48, p. 487.

TINCTURA CINCHONÆ COMPOSITA.

McElhenie, T. D.: The addition of one part of HCl to every 100 parts of the U. S. P. tincture of cinchona compound after completion is stated to dissolve any precipitate which has formed and to prevent any further precipitation for a period of over twelve months.—Nat. Druggist, 1918, v. 48, p. 260.

Engelhardt, H.: Of 60 samples of tincture of cinchona compound examined, 10 were below U. S. P. strength and 5 were above.—Proc. Maryland Pharm Assoc. 1918, p. 83.

Todd, A. R.: One sample of tincture of cinchona compound examined proved to be of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 88.

TINCTURA DIGITALIS.

Pittenger, P. S., and Mulford, H. K., Jr.: The deterioration of U. S. P. and fat-free tinctures of digitalis. From experiments it is concluded that most tinctures of digitalis deteriorate rapidly, but that fat-free tinctures do not deteriorate more rapidly than tinctures prepared by the method given in the U. S. P. VIII.—J. Am. Pharm. Assoc. 1918, v. 7, p. 236–248.

Hamilton, H. C.: The following conclusions are drawn from the results obtained in the assay of a number of digitalis tinctures: The degree of deterioration varies with different lots; the fat-free tincture made with 70 per cent alcohol is apparently less prone to deteriorate than the ordinary tincture; the deterioration of the tincture is not so rapid as isolated experiments would indicate.—J. Am. Pharm. Assoc. 1918, v. 7, p. 433–435.

TINCTURA FERRI CHLORIDI.

Bailey, E. M.: Two samples of tincture of chloride of iron examined were deficient in iron.—Rep. Connecticut Agric. Exper. Sta. 1918, p. 239.

Engelhardt, H.: Of 69 samples of tincture of ferric chloride examined, 15 were below the U. S. P. standard for iron and 5 were above.—Proc. Maryland Pharm. Assoc. 1918, p. 83.

Nachman, Gustav: Of 4 samples of tincture of ferric chloride examined, 1 was found to be below the U. S. P. standard, the sample assaying 3.74 per cent of iron, while the U. S. P. minimum requirement is 4.48 per cent of metallic iron.—Proc. Minnesota Pharm. Assoc. 1918, p. 119.

TINCTURA FERRI CITRO-CHLORIDI, N. F.

Anon.: The precipitate which forms in tincture of ferric citro-chloride is stated to be sodium chloride. Complete precipitation of the sodium chloride can be hastened by placing the tincture in a refrigerator for a week or two. The N. F. is criticized for not containing directions to this effect.—N. A. R. D. J. 1918, v. 26, p. 808.

White, W. R.: An account of some color changes in solutions containing ferric citro-chloride.—J. Am. Pharm. Assoc. 1918, v. 7, p. 225–227.

TINCTURA GENTIANÆ COMPOSITA.

Mueller, Bertha: Glycerin is considered to be a useless ingredient of tincture of gentian.—Nat. Druggist, 1918, v. 48, p. 487.

TINCTURA HYOSCYAMI.

Ewe, George E.: Experiments to determine if there is any loss of alkaloid during the evaporation of the tincture from 250 cubic centimeters to 10 cubic centimeters as directed in the U. S. P. assay for the tincture of hyoscyamus showed that the results of the assay were not affected by this seemingly vigorous treatment.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 169.

Hankey, Wm. T.: The alkaloidal content of 4 samples of tincture of hyoscyamus assayed varied from 0.0057 to 0.00789. The U. S. P. requires 0.0055 to 0.0075.—Proc. Ohio Pharm. Assoc. 1918, p. 131.

TINCTURA IODI.

Richter, E.: After 4 weeks, tincture of iodine, Ph. Germ., should contain about 8.5 per cent. of iodine and 1.3 per cent. of hydriodic acid. For the purpose of titration, greater accuracy can be obtained by using 5 cubic centimeters instead of 2 cubic centimeters. After the titration of the iodine, the acid should be titrated with N/10 potassium hydroxide solution.—Apoth.-Ztg. 1918, v. 33, p. 191–192, through Chem. Zentralbl. 1918, v. 2, p. 139–140. See also Pharm. Zentralh. 1918, v. 59, p. 213.

Pabst: The tincture of iodine of the Ph. Germ. V is stated to be unsatisfactory. The addition of KI is recommended.—Apoth.-Ztg. 1917, v. 32, p. 626, through Chem. Zentralbl. 1918, v. 89, part 1, p. 232.

Becker: A mixture of solutions of 5 per cent ferrous sulphate, 1 per cent phenol and 5 per cent tannin is recommended as a substitute for tincture of iodine in the treatment of moist eczema and granulating wounds.—Pharm. Post, 1918, v. 51, p. 73, through Schweiz. Apoth.-Ztg. 1918, v. 56, p. 360.

Chassevant, A.: A note on the substitution of iodized chloroform for tincture of iodine in war surgery.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 581–583.

Bachmann, F.: Tincture of iodine, 3 drops to the quart, is recommended to campers for the purification of water. Cloudy waters may require 6 drops.—Bull. California Bd. Health, 1917, No. 12, p. 318–320; Abstr. Bact. 1917, v. 1, p. 326.

Schieffelin, W. J.: U. S. patent No. 1,263,940 describes a first-aid ampoule formed of paraffin and containing tincture of iodine.—Chem. Abstr. 1918, v. 12, p. 1687.

Terry, Robert W.: Five samples of tincture of iodine analyzed yielded the following percentages of iodine: 7.05, 7.09, 6.98, 7.05, and 6.92.—Proc. Ohio Pharm. Assoc. 1918, p. 134.

Roberts, J. G.: One lot of tincture of iodine examined was rejected because it contained only 6.14 gms. of iodine in 100 cubic centimeters instead of not less than 6.5 gms. nor more than 7.5 gms. as required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 108.

Table showing some of the analytical results reported for tincture of iodine.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Lea, E. J.	23	11	Rep. California Bd. Health, 1918, p. 167.
Engelhardt, H.	52	24	Proc. Maryland Pharm. Assoc., 1918, p. 83.
McLaughlin, Allan J.	154	12	Rep. Massachusetts Dept. Health, 1918, No. 34, p. 331.
Howard, Chas. D.	25	3	Rep. New Hampshire Bd. Pharm., 1918, p. 84.
Todd, A. R.	77	26	Rep. Michigan D. & F. Com., 1918, p. 88.
Bachman, Gustav	36	12	Proc. Minnesota Pharm. Assoc., 1918, p. 118.
Jongeward, M.	31	15	Special Bull. North Dakota Agric. Exper. Sta., 1918, v. 5, p. 32.
van Buskirk, L. H.	36	6	Ohio Public Health J., 1918, v. 9, pp., 44, 134, 181.
Thurston, Azor	34	21	Proc. Ohio Pharm. Assoc., 1918, pp. 127-128.
Frary, Guy G.	11	2	Rep. South Dakota F. & D. Com., 1918, p. 63.
Anon	5	1	Bull. Vermont Bd. Health, 1918, v. 18, Nos. 3 and 4; v. 19, No. 1.

TINCTURA IODI DECOLORATA, N. F.

Bohrisch, P.: A specimen of decolorized tincture of iodine possessed a strong garlic odor and had separated into two layers between which were crystals of sulphur and sodium tetrathionate. The lower layer consisted chiefly of a solution of sodium and ammonium iodides, while the upper layer contained only ammonium iodide.—Pharm. Zentralh. 1917, v. 58, p. 611–613; Chem. Zentralbl. 1918, v. 1, p. 368.

TINCTURA IODI FORTIOR, N. F.

Raubenheimer, H. C.: A modified formula for Churchill's tincture of iodine calls for 16.5 grams of iodine, 3.85 grams of potassium iodide, 25 cubic centimeters of water, and enough alcohol to make 100 cubic centimeters.—D.-A. Apoth. Ztg. 1918, v. 39, p. 129.

TINCTURA MYRRHÆ.

Todd, A. R.: A sample of tincture of myrrh examined did not comply with the requirements of the U. S. P.—Rep. Michigan D. & F. Com. 1918, p. 88.

TINCTURA NUCIS VOMICÆ.

Snapp, E. L.: Of 10 samples of tincture of nux vomica examined, 8 were found to be deficient in alkaloids.—Proc. Kentucky Pharm. Assoc. 1918, p. 44.

TINCTURA OPII.

Leclerc, Henri: An account of the origin and history of laudanum.—Bull. sc. pharmacol. 1918, v. 25, part 1, p. 228–233.

Deutsche Pharmaceutische Gesellschaft: It is recommended that the Ph. Germ. method for the morphine assay of tincture of opium be simplified. A more satisfactory method is described.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 211–213.

Hankey, Wm. T.: The morphine content of 2 samples of tincture of opium assayed by the U. S. P. VIII process was found to be 1.2275 and 1.4185 per cent. The same samples, when assayed by the U. S. P. IX process, yielded 1.135 and 1.625 per cent of morphine.—Proc. Ohio Pharm. Assoc. 1918, p. 133.

Penniman, W. B. D.: Of 104 samples of laudanum examined, 21 were rejected because they did not conform with the standard set by the U. S. P.—Rep. Maryland Bd. Health, 1915, p. 174.

Anon.: One sample of tincture of opium examined was not of U. S. P. quality.—Bull. Vermont Bd. Health, 1918, v. 18, No. 4.

TINCTURA OPII CAMPHORATA.

Lea, E. J.: Of 2 samples of paregoric examined, 1 did not answer the requirements of the U. S. P.—Rep. California Bd. Health, 1918, p. 167.

Todd, A. R.: Three samples of tincture of camphorated opium examined proved to be of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 88.

van Buskirk, L. H.: One sample of paregoric examined was rejected because it did not comply with the standard set by the U. S. P.—Ohio Public Health J. 1918, v. 9, p. 44.

TINCTURA RHEI AQUOSA, N. F.

Anon.: A modified Ph. Germ. IV method for the preparation of the aqueous tincture of rhubarb is described.—Pharm. Zentralh. 1918, v. 59, p. 213.

TINCTURA STROPHANTHII.

Helch, Hans: From experiments, it is concluded that the best results are obtained by the use of dilute alcohol in the preparation of the tincture of strophanthus. The tincture prepared in this manner has a higher strophanthin content than one prepared with concentrated alcohol and a lower fatty oil content.—Pharm. Post, 1918, v. 51, p. 197–199; Chem. Zentralbl. 1918, v. 89, part 1, p. 1178.

Blomberg, J.: A detailed discussion of methods for the identification of strophanthus in its preparations. The article also contains a chart showing the color reactions of the tincture of strophanthus with sulphuric acid.—Pharm. Weekblad, 1918, v. 55, p. 1587–1597.

Neumann, J.: A report of a case of poisoning in a woman 46 years of age following the ingestion of 10 grams of tincture of strophanthus. At the end of 14 days the patient had fully recovered.—Munch. med. Wchnschr. 1916, p. 1292, through Pharm. Zentralh. 1917, v. 58, p. 488.

TINCTURA VANILLÆ, N. F.

Wichmann, H. J.: A method is described for the detection and quantitative determination of coumarin in factitious vanilla extracts.—J. Ind. & Eng. Chem. 1918, v. 10, p. 534.

TINCTURA ZINGIBERIS.

Snyder, J. P.: From experiments the author concludes that it is possible to prepare a tincture of ginger from prime Jamacia ginger root by the U. S. P. method which will yield more than 15 per cent of solids soluble in 20 cubic centimeters of water. It is, therefore, recommended that this requirement of the U. S. P. be changed to meet the conditions as they actually exist.—Am. J. Pharm. 1918, v. 90, p. 253–258.

Kraemer, Henry: In the assay of tincture of ginger, the U. S. P. directs: "Evaporate 10 gm. of tincture of ginger to dryness in a tared dish on a water bath; the yield of residue does not exceed 2 per cent." What was intended was that the residue should not be less than 2 per cent.—Proc. Am. Drug Mfg. Assoc. 1918, p. 242.

Todd, A. R.: Of 16 samples of tincture of ginger examined, 3 were not of standard quality.—Rep. Michigan D. & F. Com. 1918, p. 88.

TOXITABELLÆ HYDRARGYRI CHLORIDI CORROSIVI.

Snapp, E. L.: Of 5 samples of mercuric chloride antiseptic tablets examined, 3 did not comply with the standards set by the U. S. P.—Proc. Kentucky Pharm. Assoc. 1918, p. 45.

TRAGACANTHA.

Ewing, C. O.: Some notes on Karaya gum, a substitute for tragacanth. The gum may be distinguished from true tragacanth by the tests given in the U. S. P. IX and by its volatile acidity which corresponds to about 16 per cent of acetic acid. The volatile acidity of gum tragacanth is reported by Emery to be 2 to 3 per cent of acetic acid.—J. Am. Pharm. Assoc. 1918, v. 7, p. 787.

Micksch, Karl: A note pointing out the possibility of using cherry gum as a substitute for tragacanth.—Seifenseider-Ztg. 1918, v. 45 p. 6.

TRINITROPHENOL.

Laporte, X.: A description of a method for the colorimetric estimation of picric acid and its derivatives in body fluids.—Bull. soc. pharm. Bordeaux, 1917, No. 3, through Ann. chim. analyt. 1918, v. 23, p. 64.

Rogier: Comments on the methylene blue method for the detection of picric acid in urine.—Pharm. Zentralh. 1917, v. 59, p. 578; Schweiz. Apoth.-Ztg. 1918, v. 56, p. 265–266; Ann. chim. analyt. 1918, v. 23, p. 63–64.

Repeau: The author claims to have been the first to have used ferrous sulphate-tartaric acid solution, often called Le Mithouard's reagent, for the detection of picric acid.—Ann. chim. applicata, 1918, v. 23, p. 15–16.

Tunmann, O.: A review of methods for the detection of picric acid.—Apoth.-Ztg. 1917, v. 32, No. 68, through Pharm. Zentralh. 1918, v. 59, p. 176–177.

Ganassini, Gomenico: A contribution to the diagnosis of icterus produced by picric acid and the possible simulation of biliary pigments in the urine.—Boll. chim.-farm. 1918, v. 57, p. 161–167.

Munch, Wm. H.: An account is given of the uses of picric acid in the practice of medicine.—J. Am. Inst. Homeopathy, 1918, v. 10, p. 1017–1026.

Broom, T. F.: A 1 per cent solution of picric acid is recommended for dressing superficial wounds and for syringing suppurating sinuses, fractures, and crushed tissues.—J. Roy. Army Med. Corps, 1917, v. 28, p. 722–724.

UNGUENTA.

Jaudon, B.: A contribution to the study of ointments, with special reference to the selection of excipients.—Farm. Españ. 1918, v. 50, p. 87–88, 102–103; see also P. Carlos, ibid. p. 119–120.

de Albeniz, D. L. P.: A report of investigations on the scientific preparation of ointments and analogous forms of medication.—Farm. Españ. 1918, v. 50, p. 273–277, 289–292, 305–310.

Editorial: A discussion of various formulas for lard-free ointment bases.—Chem. & Drug. 1918, v. 90, p. 110–111.

Anon.: There is used in Sweden under the name of "Vasolinum anhydricum" an ointment base consisting of 5 parts of oxycholesterol, 2 parts each of wax and paraffin and 91 parts of liquid petrolatum.—Pharm. Weekblad, 1918, v. 55, p. 377.

Jones, E. R.: A discussion of the use of hydrogenated oils as ointment vehicles. An ointment base consisting of 125 grams of white wax and 675 grams of hydrogenated cottonseed oil is stated to be as quickly absorbed as lard, and less liable to become rancid.—Am. Perf. 1918, v. 13, p. 162–165.

Carles, P.: Comments on an article by Crouzel dealing with the possibility of using aluminum hydroxide as an excipient in the preparation of ointments.—Répert. pharm. 1918, v. 29, p. 8–9.

Editorial: Several formulas for ointment bases are presented and discussed.—Chem. & Drug. 1918, v. 90, p. 770–771.

Marsek, F. A.: A discussion of the preparation of cold creams, including descriptions of methods for testing the purity of the ingredients entering into this class of preparation.—Am. Perf. 1918, v. 13, p. 255–258, 291–292, 322–323, 355–356 and 387–388.

Soucheyre: Lard and similar fats used in ointments may be preserved for years if desiccated and kept in small, well-stoppered bottles, instead of pots presenting large surfaces.—Répert. pharm. 1918, v. 29, p. 44.

Russell, Hamilton: Notes on some practical examples of incompatibilities in ointments prescribed by physicians.—Merck's Rep. 1918, v. 27, p. 12–13.

Lefeldt, M.: Unguentum cereum of the German pharmacopœia is required to be yellow in color. This requirement should be changed, as beeswax of good quality is not always yellow in color, but is sometimes grayish-yellow.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 191.

H. K. Mulford Co.: The method employed in the Mulford analytical laboratories for the assay of calomel ointment is described in detail.—Drug. Circ. 1918, v. 62, No. 1, p. 25.

Heiden: The use of a 20 per cent, instead of a 50 per cent solution of silver nitrate, for the preparation of ointment of silver nitrate is recommended. An ointment with better keeping qualities is obtained.—Pharm. Weekblad, 1918, v. 55, p. 615.

Beck, E. G.: Satisfactory results with the use of bismuth paste in war surgery are reported.—Annals of Surgery, 1918, v. 67, p. 392, through J. Am. M. Assoc. 1918, v. 70, p. 1,500.

Emerson, M. L.: A favorable report of the use of bismuth iodoform petrolatum paste in the treatment of recent wounds.—J. Am. M. Assoc. 1918, v. 70, p. 79–80.

Colin: A tar ointment intended for use in the treatment of wounds obtained in war, burns, etc., consists of 1 part of tar, 10 parts of zinc oxide and 100 parts of petrolatum. An abstract.—Répert. pharm. 1918, v. 29, p. 326.

UNGUENTUM ACIDI BORICI.

Bagshaw, C. R.: From experiments, it is concluded that the ignition method for the determination of boric acid in the ointment of boric acid gives low results. Data bringing out this point are given.—Analyst, 1918, v. 43, p. 138–139.

UNGUENTUM DIACHYLON.

Anon.: It is suggested that the following method for the preparation of diachylon ointment be included in the next edition of the Ph. Germ.: triturate 10 parts of litharge thoroughly with 28 parts of liquid paraffin, place on a water bath and gradually add 18 parts of oleic acid.—Pharm. Zentralh. 1918, v. 59, p. 213.

UNGUENTUM PHENOLIS.

H. K. Mulford Co.: Ointment of phenol made according to the U. S. P. VIII has the odor of phenol, whereas that made according to the U. S. P. IX does not. This is stated to be due to the fact that the odor of the phenol is masked by the odor of the benzoinated lard which is used in making the ointment according to the method in the revised edition of the U. S. P.—Drug. Circ. 1918, v. 62, No. 5, p. 25.

UNGUENTUM SULPHURIS COMPOSITUM, N. F.

Söderberg, Gustaf: A formula, with directions, is given for the preparation of "sulfopinol," a substitute for compound sulphur ointment.—Svensk farm. Tidskr. 1918, v. 22, p. 361–362; Schweiz. Apoth.-Ztg. 1918, v. 56, p. 517.

UNGUENTUM ZINCI OXIDI.

Jones, E. R.: The following formula is recommended for the preparation of zinc ointment: zinc oxide, 200; white wax, 125; hydrogenated cottonseed oil, 675. This ointment is more readily absorbed and is not as prone to become rancid as that made by the U. S. P. method.—Bull. Pharm. 1918, v. 32, p. 349.

Hahn, Edward T. and Fischelis, Robert P.: The revision committee of the U. S. P. should be appealed to in an endeavor to have the official formula for zinc oxide ointment revised, making petrolatum the vehicle in place of lard, as the former does not become rancid or granular.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 149–150.

UVA URSI.

Farwell, O. A.: The proper name for the plant yielding this product is *Uva-Ursi uva-ursi* (Linné) Britton.—Drug. Circ. 1918, v. 62, p. 536.

Caesar and Loretz: The Ph. Germ. V requirements for uva ursi only permit the use of leaves obtained from Bavaria and the Swiss Alps. The requirement should be so modified as to include also the Spanish leaves.—Pharm. Zentralh. 1918, v. 59, p. 28.

Lucker, Ed.: The red color produced by solution of vanillin in hydrochloric acid is recommended as an identity test for uva ursi suitable for the Ph. Germ.—Apoth.-Ztg. 1918, v. 33, p. 170.

Tunmann, O.: It is recommended that the new edition of the Ph. Germ. give a test for uva ursi based on the characteristics of the leaf hairs.—Apoth.-Ztg. 1918, v. 33, p. 315.

Shippee and Fogde: An analysis of the fruits of *Arctostaphylos uva-ursi* yielded 4 per cent of protein, 21 per cent of sugars (chiefly fructose) a gummy substance, and 2.9 per cent of ash.—Chem. News, 1918, v. 117, p. 254.

Wasicky, R.: A note on the possibility of using *Arbutus unedo* as a substitute for *uva ursi.*—Ztschr. allgem. österr. Apoth.-Ver. 1917, v. 55, p. 343-345, through Chem. Zentralbl. 1918, v. 89, p. 368.

VALERIANA.

Rydén, Th.: Upon analysis, the rhizomes of *Valeriana officinalis* yielded 2.998 to 4.77 per cent of volatile acids calculated as valerianic acid. The rhizomes of *Valeriana excelsa* Poiret yielded 5.33 to 8.22 per cent.—Svensk farm. Tidskr. 1917, v. 21, p. 525–529, through Schweiz. Apoth.-Ztg. 1918, v. 56, p. 177.

Anon.: A review of published work on the determination of the volatile constituents of valerian root.—Pharm. Zentralh. 1918, v. 59, p. 127.

Anon.: The demand for valerian far exceeds the supply in England, as it is extensively used in the treatment of shell-shock. Indian valerian is stated to be as valuable as the English-grown drug and to have a more agreeable taste. Japanese valerian has an unpleasant flavor.—Chem. & Drug. 1918, v. 90, p. 498.

Anderson, George A.: Three samples of Indian valerian examined were found to be inferior to the true valerian in both odor and taste.—Proc. N. W. D. A. 1918, p. 236.

VANILLA.

Anon.: The exports of vanilla from Seychelles amounted to only 6½ tons in 1917.—Chem. & Drug. 1918, v. 90, p. 1046.

Rabak, Frank: A continuation of an article dealing with the effect of curing on the aromatic constituents of vanilla beans.—Am. Perf. 1918, v. 12, p. 326–327, 361–362.

Anon.: Some observations are presented on the proper method of extracting vanilla beans.—Pract. Drug. 1918, v. 36, No. 10, p. 32.

VANILLINUM.

Anon.: The fourth edition of the supplement to the Ph. Germ. gives the following characteristics for vanillin: Fine crystalline needles; soluble in 80 to 100 parts of water at 15° C. and in 20 parts of water at 75 to 80° C.; readily soluble in alcohol, ether, and chloroform; melting point, 81 to 82° C.; residue on combustion not over 0.1 per cent.; on the addition of ferric chloride solution, an aqueous or alcoholic solution of vanillin turns blue; 0.1 gram dissolves in 2 cubic centimeters of sulphuric acid on heating gently, forming a clear solution of a light yellow color.—Semi-Ann. Rep. 1917, April, p. 86.

Issoglio, G.: Methods for the detection of salicylic acid, acetanilid, and benzoic acid when used as adulterants of vanillin are described.—Chem. Zentralbl. 1917, v. 2, p. 495, through Pharm. Zentralh. 1918, v. 59, p. 147.

VERATRINA.

Farwell, O. A.: The binomial for the plant yielding veratrine should be *Skoinolon officinale* (Chamisso and Schlechtendal) N. Comb.—Drug. Circ. 1918, v. 62, p. 536.

Freund, Martin and Schwarz, Adolph: Cevadine (veratrine). III. A report of further studies on the chemical constituents of veratrine.—J. prakt. Chem. 1918, v. 96, p. 236–244, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 304.

VERATRUM VIRIDE.

Kaufmann, Adolf, and Müller, Hermann: A report of researches on some derivatives of veratrol.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 123–130.

Collins, Russell J., and Hanzlik, Paul J.: Further observations on the clinical action of veratrum, from the standpoint of dosage, effect in various circulatory disorders and other pathological conditions.—J. Pharmacol. & Exper. Therap. 1918, v. 11, p. 89–101.

Hinsdale, Albert E.: An experimental study of the action of veratrum viride upon muscular tissue.—J. Am. Inst. Homeop. 1918, v. 10, p. 1243–1246.

Helbing, H. H.: Notes on the use of veratrum in the treatment of increased blood pressure.—Nat. Eclect. M. Assoc. Quart. 1918, v. 10, p. 289–292. For additional notes on the therapeutic uses of veratrum, see W. E. Daniels, ibid. p. 322–324.

VERBASCI FOLIA, N. F.

Kobert et al.: A report of new investigations on saponins. *Verbascum thapsus* was found to contain several saponins.—Pharm. Weekblad, 1918, v. 55, p. 49.

VERBENA.

Holste, A.: Verbenalin, a glucoside of verbena, is compared with pituitrin and the amines of ergot in its action upon the uterus.—Ztschr. exper. Path. Therap. 1918, v. 19, p. 483–493.

VIBURNUM OPULUS, N. F.

Viehoever, Arno, et al.: Viburnum barks of commerce. Attention is directed to the extent of the substitution of *Acer spicatum* for *Viburnum opulus* bark. The macroscopic and microscopic characteristics of the two are described and distinguishing tests are given.—J. Am. Pharm. Assoc. 1918, v. 7, p. 914–952.

Anderson, George A.: *Acer spicatum*, or mountain maple, is frequently offered as true cramp bark.—Proc. N. W. D. A. 1918, p. 235.

VIBURNUM PRUNIFOLIUM.

Rusby, H. H.: There is considerable dissatisfaction with the action of the U. S. P. revision committee in permitting the use of either the stem or root bark of viburnum, with no specification as to their ratio. Careful manufacturers use only the root bark which leaves a large amount of stem bark to be sold to the careless.—Proc. New York Pharm. Assoc. 1918, p. 193.

Anderson, George A.: Every shipment of black haw root bark examined had to be garbled before it could be used. The amount of wood present in the drug varied from 10 to 35 per cent.—Proc. N. W. D. A. 1918, p. 234.

VINA.

Duboux, M.: New methods for the determination of hydrogen-ion concentration applied to wines.—J. chim. phys. 1917, v. 15, p. 473–501.

Baragiola, W. I., and Schuppi, O.: An investigation of the method of W. Möslinger for the determination of lactic acid in wine. Several sources of error are pointed out.—Mon. sci. 1918, v. 8, p. 100–113, through Chem. Abstr. 1918, v. 12, p. 2036–2037. See also Roettgen, Ztschr. Unters. Nahr.-u. Genussm. 1917, v. 34, p. 198–207.

Laborde, J.: New methods are described for the separation and determination of lactic, succinic and malic acids in wine.—Compt. rend. acad. sc. 1917, v. 165, p. 793–795.

Pratolongo, Ugo: An examination of the methods of Gauthier, Halpen, Blarez, and Roos for detecting adulterated wines in order to ascertain whether these methods distinguish clearly between natural and adulterated wines.—Staz. sper. gric. ital. 1917, v. 50, p. 315–364, through Chem. Abstr. 1918, v. 12, p. 2107.

Ripper, M., and Wohack, Franz: Microanalysis of wine. II. A process for the estimation of alcohol in wine is adapted from Zeisel's iodide method.—Ztschr. landw. Versu. 1917, v. 20, p. 102–104, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 512.

Medinger, P., and Michel, F.: A test for cider in wine is based on the fact that a concentrated solution of sodium nitrite produces a dark brown or brownish black coloration when the former is present.—Chem. Ztg. 1918, v. 42, p. 230, through J. Soc. Chem. Ind. 1918, v. 37, p. 386A. See also Mach and Fischer, Chem. Ztg. 1918, v. 42, p. 326.

VINUM COLCHICI CORMI, N. F.

Bailey, E. M.: One sample of wine of colchicum corm examined assayed 0.096 gram colchicine. The N. F. requires that wine of colchicum shall yield not less than 0.126 nor more than 0.154 gram of colchicine.—Rep. Connecticut Agric. Exper. Sta. 1918, p. 240.

VINUM COLCHICI SEMINIS, N. F.

Bailey, E. M.: One sample of wine of colchicum seed examined contained 31.50 per cent of alcohol and 0.070 gram of colchicine per 100 cubic centimeters. The N. F. requires that it shall contain not less than 0.036 nor more than 0.044 gram of colchicine.—Rep. Connecticut Agric. Exper. Sta. 1918, p. 240.

VINUM XERICUM, N. F.

Anderson, George A.: One shipment of sherry wine examined had a turbid appearance and quite an acid taste.—Proc. N. W. D. A. 1918, p. 230.

VIRUS VACCINICUM.

Krumweide, Charles, Jr., et al.: A report of experiments with the use of brilliant green as a bactericidal agent for the purification of vaccine virus.—J. Infec. Dis. 1918, v. 22, p. 118–124.

Gins, H. A., and Weber, R.: Studies are reported on the detection of vaccine virus in the organs of rabbits after injection into the blood vessels.—Ztschr. Hyg. 1916, v. 82, p. 143–154, through Chem. Zentralbl. 1916, v. 2, p. 671.

ZINCI CHLORIDUM.

Cameron, F. K., et al.: U. S. patents Nos. 1,261,695 and 1,261,696 describe the preparation of zinc chloride from zinc ores by action of hydrochloric acid or sodium chloride.—Chem. Abstr. 1918, v. 12, p. 1589.

Lefeldt, M.: The Ph. Germ. test for oxychloride in zinc chloride is criticized for being too strict. It is stated that it should be permitted to add 2 or 3 drops of hydrochloric acid instead of 1 to clear up the solution in making the test.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 192.

DeG. Peacock, Josiah C. and Bertha L.: An investigation of solvents suitable for dissolving zinc chloride. These investigations showed that the separation of zinc oxychloride, when zinc chloride is dissolved in water, can be prevented by the addition of an equal weight of boric acid.—Am. J. Pharm. 1918, v. 90, p. 706–717.

Broeksmit, T. C. N.: The Ph. Ndl. requires that zinc chloride should give a clear solution with 0.35 parts of water. The commercial product always gives a precipitate because of basic impurities. It is recommended that this solution be prepared by dissolving 21.1 grams of zinc sulphate and 17.9 grams of barium chloride in 100 grams of water. An 8 per cent solution is obtained that remains clear in any amount of water.—Pharm. Weekblad, 1918, v. 55, p. 1409–1410.

ZINCI OXIDUM.

Sartari, F.: A brief historical article on the manufacture of zinc white in Italy.—Drugs, Oils and Paints, 1918, v. 34, p. 48.

Collins, W. D., and Clarke, W. F.: The U. S. P. test for heavy metals will not detect less than 0.05 per cent of Pb in ZnO. It is possible at the present time to obtain ZnO which is of much higher quality than required by the U. S. P with respect to Pb.—J. Ind. & Eng. Chem. 1918, v. 11, p. 138–139.

LaWall, Charles H.: Two tests for the detection of lead in zinc oxide, which are stated to be superior to the U. S. P. test for heavy metals, are described in detail. It is suggested that these tests replace the present U. S. P. process for detecting lead in zinc oxide.—Proc. New Jersey Pharm. Assoc. 1918, p. 52–53; Am. J. Pharm. 1918, v. 90, p. 499–501.

Anon.: In the Ph. Germ. test for calcium salts in zinc oxide, it is suggested that 3 to 5 drops of ammonium hydroxide solution be used and that the precipitate be allowed to form in acetic acid solution.—Pharm. Zentralh. 1918, v. 59, p. 213.

Kohn-Abrest, E.: A table is given comparing the amount of arsenic present in zinc oxide and other common chemicals for the years 1916 and 1917. The Marsh apparatus and methods for determining arsenic are also described.—Rev. prod. chim. 1918, v. 21, p. 199–202 and 214–216.

Éwe, G.: Nine lots of zinc oxide examined contained excessive heavy metals ranging from 0.05 to 0.236 per cent, calculated as metallic lead.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 108.

LaWall, C. H.: Of 8 samples of zinc oxide examined, only 2 responded to the U. S. P. heavy metal test.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 108.

Hankey, Wm. T.: One to 4 samples of zinc oxide examined assayed low in zinc oxide content. Most samples of zinc oxide contain traces of iron.—Proc. Ohio Pharm. Assoc. 1918, p. 132.

Roberts, J. G.: One sample of zinc oxide examined contained an excess of heavy metals.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 108.

ZINCI SULPHAS.

Thomas, K. B.: Three methods are described for recovering zinc sulphate by leaching the flue dust from a Matthiessen-Hegeler kiln.—Mining Sci. Press. 1917, v. 115, p. 724, through Chem. Abstr. 1918, v. 12, p. 466.

Caples, R. B., and Frick, F. F.: U. S. patent No. 1,263,852. Zinc sulphate solutions are freed from arsenic, antimony, and copper by subjecting the solution at 80° C. to the action of metallic zinc.—Chem. Abstr. 1918, v. 12, p. 1691.

ZINCUM.

Anon.: A review of a monograph issued by the Mineral Resources Committee of the Imperial Institute, which gives information relative to the zinc ore resources of the British Empire, the production, properties, and uses of the metal.—Nature, 1918, v. 101, p. 226–227.

Anon.: Tentative specifications are given for 5 grades of zinc spelter. Methods of sampling and drilling are also described.—Proc. Am. Soc. Testing Mat. 1917, v. 17, part 1, p. 615–621.

French, T.: An article discussing the future of electrolytic zinc.—Trans. Am. Electrochem. Soc. v. 32. through Chem. Abstr. 1918, v. 12, p. 23.

Bancroft, Wilder D.: Reasons are given explaining why the sign of the zinc electrode should be called minus.—J. Phys. Chem. 1918, v. 22, p. 373–379.

Stone, G. C.: The effect of impurities on the hardness of cast zinc or spelter. The principal cause of unusual hardness in spelter is attributed to cadmium.—J. Am. Inst. Metals, 1918, v. 21, p. 11–14.

Bertiaux, L.: A detailed account of the methods used in the laboratories of the French Metals Company for the analysis of commercial zinc.—Ann. chim. analyt. 1918, v. 23, p. 161–169 and 181–191.

Carnot, A.: A method for determining zinc consists in adding sufficient ammonia water or ammonium carbonate to redissolve the precipitate which forms and then precipitaing $Zn(OH)_2$ by boiling. The precipitate is collected, ignited and weighed as oxide or reduced to metal.—Compt. rend. acad. sc. 1918, v. 166, p. 245–251; Ann. chim. analyt. 1918, v. 23, p. 69–75.

Jameson, George S.: A comparison of the gravimetric and volumetric methods for the determination of zinc precipitated as zinc mercury thiocyanate.—J. Am. Chem. Soc. 1918, v. 40, p. 1036–1039.

Howden, R.: The volumetric estimation of zinc by acidimetric titration is described. No results are reported.—Chem. News, 1918, v. 117, p. 322.

Hassreidter, V.: Some observations on the determination of zinc by Schaffner's method, with special reference to the separation of iron.—Ztschr. analyt. Chem. 1917, v. 56, p. 506–509 through J. Soc. Chem. Ind. 1918, v. 37, p. 168A.

Roberts, J. G.: One lot of zinc examined contained a decided trace of arsenic.—Proc. Pennsylvania Pharm. Assoc. 1918, p. 108.

ZINGIBER.

Nomura, Hiroshi: The ketone isolated from ginger, to which the author assigned the name *zingiberone* in a former paper, bears no relation to the *zingiberol* obtained by Brooks. In order to avoid confusion, the name *zingerone* is substituted for *zingiberone*.—Sci. Rep. Tohoku Imp. Univ. 1918, v. 6, p. 375, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 396.

Nomura, H.: The pungent principles of Japanese ginger on distillation yield, in addition to zingerone, a substance called shagoal, $C_{17}H_{24}O_3$. The composition and properties of this new substance are described.—Sci. Rep. Tohoku Univ. 1918, v. 7, p. 67–77, through J. Soc. Chem. Ind. 1918, v. 37, p. 607A.

Morris, R. L.: The Ph. Brit. requirement of not less than 1.5 per cent of insoluble ash for ginger is stated to be unreasonable. It is thought that what is really meant is that the ash soluble in water should not be less than 1.5 per cent.—Pharm. J. 1918, v. 101, p. 313.

Sen, J. N.: A report dealing with the composition of some Indian feeding stuffs includes analytical data obtained in the examination of samples of ginger.—Bull. Agric. Research. Inst. Pusa, 1917, v. 70, p. 1–60, through Chem. Abstr. 1918, v. 12, p. 2393.

HYGIENIC LABORATORY BULLETINS OF THE PUBLIC HEALTH SERVICE.

The Hygienic Laboratory was established in New York, at the Marine Hospital on Staten Island, August, 1887. It was transferred to Washington, with quarters in the Butler Building, June 11, 1891, and a new laboratory building, located in Washington, was authorized by act of Congress March 3, 1901.

Of the bulletins published by the laboratory since its establishment, copies of the following are available for distribution and may be obtained without cost by applying to the Surgeon General, United States Public Health Service, Washington, D. C.

No. 2.—Formalin disinfection of baggage without apparatus. By M. J. Rosenau.

No. 43.—The standardization of tetanus antitoxin (an American unit established under authority of the act of July 1, 1902). By M. J. Rosenau and John F. Anderson.

No. 51.—Chemical tests for blood. By Joseph H. Kastle.

No. 52.—Report No. 3 on the origin and prevalence of typhoid fever in the District of Columbia (1908). By M. J. Rosenau, Leslie L. Lumsden, and Joseph H. Kastle.

No. 55.—Quantitative pharmacological studies; adrenalin and adrenalin-like bodies. By W. H. Schultz.

No. 59.—The oxidases and other oxygen catalysts concerned in biological oxidations. By Joseph H. Kastle.

No. 65.—Facts and problems of rabies. By A. M. Stimson.

No. 73.—The effect of a number of derivatives of choline and analogous compounds on the blood pressure. By Reid Hunt and R. de M. Taveau.

No. 78.—Report No. 4 on the origin and prevalence of typhoid fever in the District of Columbia (1909). By L. L. Lumsden and John F. Anderson. (Including articles contributed by Thomas B. McClintic and Wade H. Frost.)

No. 81.—Tissue proliferation in plasma medium. By John Sundwall.

No. 89.—Sewage pollution of interstate and international waters with special reference to the spread of typhoid fever. VI. The Missouri River from Sioux City to its mouth. By Allan J. McLaughlin.

No. 94.—I. Collected studies on the insect transmission of *Trypanosoma evansi.* By M. Bruin Mitzmain. II. Summary of experiments in the transmission of anthrax by biting flies. By M. Bruin Mitzmain.

No. 95.—Laboratory studies on tetanus. By Edward Francis.

No. 96.—1. Report of investigation of coastal waters in the vicinity of Gulfport and Biloxi, Miss., with special reference to the pollution of shellfish. By R. H. Creel. 2. A comparison of methods for the determination of oxygen in waters in presence of nitrite. By Elias Elvove. 3. Some new compounds of the choline type. III. Including preparation of monoacetate of *a, B* dioxy-*B*-methyl butane. By G. A. Menge. 4. The detection of white phosphorus in matches. By Earle B. Phelps. 5. The chemical composition of rubber in nursing nipples and in some rubber toys. By Earle B. Phelps and Albert F. Stevenson. 6. The analysis of thymol capsules. By Atherton Seidell. 7. Seasonal variation in the composition of the thyroid gland. By Atherton Seidell and Frederic Fenger. 8. Note on a new apparatus for use with the Winkler method for dissolved oxygen in water. By Hyman L. Shoub. 9. The pharmacological action of some serum preservatives. By Carl Voegtlin.

No. 97.—1. Some further siphonaptera. 2. A further report on the identification of some siphonaptera from the Philippine Islands. 3. The taxonomic value of the copulatory organs of the females in the order of siphonaptera. By Carroll Fox.

No. 99.—The Friedmann treatment for tuberculosis. A report of the board appointed for its investigation. By John F. Anderson and Arthur M. Stimson.

No. 100.—1. Pituitary standardization; a comparison of the physiological activity of some commercial pituitary preparations. By George B. Roth. 2. Examination of drinking water on railroad trains. By Richard H. Creel. 3. Variation in the epinephrine content of suprarenal glands. By Atherton Seidell and Frederic Fenger.

No. 101 (Reprint a).—IV. The sterilization of dental instruments. By H. E. Hasseltine.

No. 102.—I. Digitalis standardization. The physiological valuation of fat-free digitalis and commercial digitalin. By George B. Roth. II. Preliminary observations on metabolism in pellagra. By Andrew Hunter, Maurice H. Givens, and Robert C. Lewis.

No. 103.—I. Chemical changes in the central nervous system as a result of restricted vegetable diet. By Mathilde L. Koch and Carl Voegtlin. II. Chemical changes in the central nervous system in pellagra. By Mathilde L. Koch and Carl Voegtlin.

No. 104.—Investigation of the pollution and sanitary conditions of the Potomac watershed; with special reference to self-purification and sanitary condition of shellfish in the lower Potomac River. By Hugh S. Cumming. With plankton studies by W. C. Purdy and hydrographic studies by Homer P. Ritter.

No. 105.—Digest of comments on the Pharmacopœia of the United States of America and on the National Formulary for the calendar year ending December 31, 1914. By Martin L. Wilbert.

No. 106.—Studies in pellagra. I. Tissue alteration in malnutrition and pellagra. By John Sundwall. II. Cultivation experiments with the blood and spinal fluid of pellagrins. By Edward Francis. III. Further attempts to transmit pellagra to monkeys. By Edward Francis.

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